FAA RESPONSE TO AIR TRAFFIC CONTROL SYSTEM DEFICIENCIES

HEARINGS

BEFORE A

SUBCOMMITTEE OF THE COMMITTEE ON GOVERNMENT OPERATIONS HOUSE OF REPRESENTATIVES

NINETY-FOURTH CONGRESS

SECOND SESSION

MARCH 9 AND 16, 1976

Printed for the use of the Committee on Government Operations

U.S. GOVERNMENT PRINTING OFFICE
69-696 WASHINGTON : 1976

COMMITTEE ON GOVERNMENT OPERATIONS

JACK BROOKS, Texas, *Chairman*

L. H. FOUNTAIN, North Carolina
JOHN E. MOSS, California
DANTE B. FASCELL, Florida
TORBERT H. MACDONALD, Massachusetts
WILLIAM S. MOORHEAD, Pennsylvania
WM. J. RANDALL, Missouri
BENJAMIN S. ROSENTHAL, New York
JIM WRIGHT, Texas
FERNAND J. ST GERMAIN, Rhode Island
FLOYD V. HICKS, Washington
DON FUQUA, Florida
JOHN CONYERS, JR., Michigan
BELLA S. ABZUG, New York
JAMES V. STANTON, Ohio
LEO J. RYAN, California
CARDISS COLLINS, Illinois
JOHN L. BURTON, California
RICHARDSON PREYER, North Carolina
MICHAEL HARRINGTON, Massachusetts
ROBERT F. DRINAN, Massachusetts
EDWARD MEZVINSKY, Iowa
BARBARA JORDAN, Texas
GLENN ENGLISH, Oklahoma
ELLIOTT H. LEVITAS, Georgia
DAVID W. EVANS, Indiana
ANTHONY MOFFETT, Connecticut
ANDREW MAGUIRE, New Jersey
LES ASPIN, Wisconsin

FRANK HORTON, New York
JOHN N. ERLENBORN, Illinois
JOHN W. WYDLER, New York
CLARENCE J. BROWN, Ohio
GILBERT GUDE, Maryland
PAUL N. McCLOSKEY, JR., California
SAM STEIGER, Arizona
GARRY BROWN, Michigan
CHARLES THONE, Nebraska
ALAN STEELMAN, Texas
JOEL PRITCHARD, Washington
EDWIN B. FORSYTHE, New Jersey
ROBERT W. KASTEN, JR., Wisconsin
WILLIS D. GRADISON, JR., Ohio

WILLIAM M. JONES, *General Counsel*
JOHN E. MOORE, *Staff Administrator*
WILLIAM H. COPENHAVER, *Associate Counsel*
LYNNE HIGGINBOTHAM, *Clerk*
J. P. CARLSON, *Minority Counsel*

GOVERNMENT ACTIVITIES AND TRANSPORTATION SUBCOMMITTEE

WM. J. RANDALL, Missouri, *Chairman*

CARDISS COLLINS, Illinois
GLENN ENGLISH, Oklahoma
BELLA S. ABZUG, New York
RICHARDSON PREYER, North Carolina
DAVID W. EVANS, Indiana
FLOYD V. HICKS, Washington
LES ASPIN, Wisconsin

CHARLES THONE, Nebraska
EDWIN B. FORSYTHE, New Jersey
WILLIS D. GRADISON, JR., Ohio

EX OFFICIO

JACK BROOKS, Texas

FRANK HORTON, New York

WILLIAM G. LAWRENCE, *Acting Staff Director*
MILES Q. ROMNEY, *Counsel*
BRUCE BUTTERWORTH, *Research Assistant*
MARJORIE A. EAGLE, *Clerk*
RICHARD M. TEMPERO, *Minority Professional Staff*

CONTENTS

FAA RESPONSE TO AIR TRAFFIC CONTROL SYSTEM DEFICIENCIES

TUESDAY, MARCH 9, 1976

HOUSE OF REPRESENTATIVES,
GOVERNMENT ACTIVITIES AND
TRANSPORTATION SUBCOMMITTEE
OF THE COMMITTEE ON GOVERNMENT OPERATIONS,
Washington, D.C.

The subcommittee met, pursuant to call, at 10:15 a.m., in room 2203, Rayburn House Office Building, Hon. Wm. J. Randall (chairman of the subcommittee) presiding.

Present: Representatives Wm. J. Randall, Glenn English, Richardson Preyer, David W. Evans, Edwin B. Forsythe, and Willis D. Gradison, Jr.

Also present: William G. Lawrence, acting staff director; Miles Q. Romney, counsel; Bruce Butterworth, research assistant; Marjorie A. Eagle, clerk; and Richard M. Tempero, minority professional staff, Committee on Government Operations.

OPENING STATEMENT OF CHAIRMAN RANDALL

Mr. RANDALL. The subcommittee will come to order.

At 5:22 p.m. on November 26, 1975, two jumbo jets with 306 people on board—an American Airlines DC–10 and a TWA Lockheed 1011—were on a collision course near Carleton, Mich. Both aircraft were operating in instrument weather conditions under the control of Cleveland Air Route Traffic Control Center. The two aircraft were closing at a relative speed of nearly 1,000 miles per hour. Seconds before the seemingly certain impact, a radar controller noticed with disbelief the developing collision, and ordered the DC–10 to descend immediately. The two aircraft missed each other by between 20 and 100 feet. Those passengers and flight attendants not strapped to their seats were pinned momentarily against the ceiling as the DC–10 began its dive, and then came crashing down with tremendous force as the aircraft pulled up. This violent evasive manuever caused three persons to be injured seriously. Fortunately, there was no structural damage to the DC–10, and the injured received medical treatment after an emergency landing at Detroit. There were no deaths, but because there were serious injuries, this near midair collision is classified by Federal Aviation Administration (FAA) and National Transportation Safety Board (NTSB) as an accident. But more important, it was perhaps only one one-hundredths of a second away from being classified as a catastrophe.

NTSB investigated the accident, and on February 25, 1976, released its aircraft accident report—No. 76–3. The Board determined that the probable cause of the accident was failure of the first radar controller to apply prescribed separation criteria. Radar controller No. 1 simply forgot the American DC–10 after it was handed off to him by the Chicago Air Route Traffic Control Center. The NTSB found that there were no mechanical difficulties; it was human error, a human failure, pure and simple. There were no misunderstandings based on ambiguous terminology.

While the two aircraft were approaching each other, radar controller No. 1 had also undertaken certain secondary duties. Shortly thereafter, he was routinely relieved by radar controller No. 2. When he briefed controller No. 2, he did not mention the American DC–10. A conversation about the cloud ceiling which followed between several aircraft alerted the American pilot and controller No. 2. This prompted the latter's immediate descent order.

This was what the FAA terms an air traffic control system error. This particular system error involved not machinery, but a simple human error of complacency and inattention. There is a danger that in this highly automated air traffic control system the controller can be lulled into complacency. This accident is, and should be, a startling reminder to FAA that no matter how automated the air traffic control system becomes, the controller must be continually and constantly alert. He must have a defensive and protective imagination for things that can go wrong. He should be continually suspicious.

We are here today to find out what the FAA is doing to instill this defensive and protective imagination into the minds of its controllers. We want to find out what the FAA is doing to prevent, or minimize the possibility of, another accident of this kind. How is it changing the environment in which controllers work to create more attentiveness, and to prevent these errors from becoming catastrophic.

We are also here to question the FAA on its policy and practice with respect to the actual controllers who have contributed to a system error. We want to find out what the FAA's response is to controllers who are determined to be careless or negligent beyond a reasonable doubt.

These general questions lead to some other questions about actions and decisions of supervisory personnel in the instant accident case, specifically with respect to the prospective and actual resumption of ATC duties by radar controller No. 1.

Let the record very clearly and abundantly show that we are not referring to anyone here by name. We reached that decision before we started this hearing, although the names of all these gentlemen have been published many times.

So we are going to call him radar controller No. 1.

First: It is our understanding that sometime between the accident and the December 12–14 NTSB hearing deposition, the Chief of the Cleveland center—in response to a question from radar controller No. 1—told the controller that he could go back to his old position when he was ready. Was this offer consistent with the procedures set out in FAA handbooks and was it in the interest of public safety?

Second: We understand that after the NTSB hearing, the controller was monitored and eventually placed back on a radar position. The

FAA handbooks require appropriate disciplinary action where the involvement of the controller in the system error is one of carelessness or negligence beyond reasonable doubt. If carelessness beyond reasonable doubt is involved, was the retraining and reemployment of radar controller No. 1 appropriate action at a time when FAA had not yet established whether he had been careless beyond reasonable doubt.

Third: The controller eventually asked to be relieved of his duties because of nervous problems. Since these problems could have affected his work, we want to discuss the appropriateness of this action.

We question whether the actions taken by FAA following this accident were consistent with FAA policies and procedures in the FAA handbooks and orders supplied to the subcommittee.

We also wonder whether the actions taken in this case are representative of actions taken in others. These are the subjects we are here to explore. We hope this will be an informative discussion. We are all here to insure that the traveling public is not subjected to these kinds of frightening accidents again.

Departing from any previous considered remarks, the Chair wants to say that, what we are talking about here this morning is human lives. We came perilously close to losing 306 of them. We want to know what has been done about it.

We have with us Mr. Raymond G. Belanger, Director of the Air Traffic Service of the FAA Department of Transportation.

Will you give us your statement, Mr. Belanger, please.

STATEMENT OF RAYMOND G. BELANGER, DIRECTOR, AIR TRAFFIC SERVICE, FEDERAL AVIATION ADMINISTRATION, DEPARTMENT OF TRANSPORTATION; ACCOMPANIED BY DR. H. L. REIGHARD, FEDERAL AIR SURGEON; JOHN F. WUBBOLDING, CHIEF, AIR TRAFFIC DIVISION, GREAT LAKES REGION; AND JOHN RYAN, CHIEF, CLEVELAND AIR ROUTE TRAFFIC CONTROL CENTER

Mr. BELANGER. Mr. Chairman and members of the subcommittee, I am Raymond Belanger, Director of the Air Traffic Service for the FAA. Accompanying me today are, on my right, Dr. H. L. Reighard, the Federal Air Surgeon; on my immediate left, Mr. John Ryan, Chief of the Cleveland Air Route Traffic Control Center (ARTCC); and on my far left, Mr. John F. Wubbolding, Chief, Air Traffic Division, Great Lakes Region.

You have asked us to appear today to discuss the role of human factors in air traffic system errors. In addition, you have asked us to comment on the National Transportation Safety Board's (NTSB) aircraft accident report on the near midair collision of November 26, 1975.

The Administrator, Dr. John L. McLucas, appeared before this subcommittee last December to discuss the problem of near midair collisions. Dr. McLucas outlined the FAA program effort to prevent near midair collisions and emphasized in his testimony the upgraded and improved equipment the FAA has installed and would be developing.

As he indicated then, the conflict alert function is now operational at all en route centers. However, the Administrator pointed out, "Of course, whenever you have a system based on both automated and human factors, the possibility of human error is always present."

Today, I would like to concentrate on the area of human factors in our air traffic control system.

As I am sure the subcommittee is aware, our air traffic control system is the most complex, and yet the safest, in the world. The FAA remains committed to making the system safer whenever possible.

An important way to accomplish this objective is by studying and evaluating problems when they arise. We have initiated a comprehensive and effective program to coordinate our evaluations of system errors. These evaluations allow us to determine corrective action and remedial recommendations.

How this process works is set forth in FAA Order 8020.3A, the air traffic system error reporting program. A copy of this order has already been provided to the subcommittee staff, but I have another copy which I would be pleased to submit for the hearing record.

Mr. RANDALL. Will the gentleman suspend for a moment, please?

[Discussion off the record.]

Mr. RANDALL. On the record.

Proceed, sir.

Mr. BELANGER. In the order, the FAA stated policy is, "* * * that the only effective means of reducing error occurrence is to identify and correct the causes of the failure, human or otherwise, which lead to system errors."

Before I describe in detail our procedures, I should explain what a system error is. A system error is an operational error in which a failure of the equipment, human, procedural, and/or other system elements results in less than the appropriate separation minimums. What is the proper minimum varies depending on the circumstances.

You should realize that system errors don't equate to safety hazards. For example, suppose the specified minimum is 10 minutes flying time between two aircraft. However, the airspeed of one of the aircraft may vary slightly, and the aircraft are 9 minutes and 40 seconds apart. This would technically be a system error. However, there is no hazard and safety has not been derogated to a measurable degree. The minimums we establish leave a wide safety margin.

Let me now describe what happens after a system error has occurred under our procedures.

Operational errors or suspected errors that occur in Air Traffic Service facilities are immediately reported to both regional and Washington headquarters. Additionally, the chief of the facility immediately designates a team to analyze and reconstruct the actual or suspected error and telephone a preliminary analysis of their investigation to Washington headquarters within 6 hours of the occurrence.

The air traffic controllers who appear to be directly involved are temporarily relieved of operational duty immediately following discovery of the error. This initial removal is not considered to be disciplinary or punitive action. The removal is to permit the immediate preparation of facts and supporting data for facility investigation. In

the event human error was involved, the removal affords further protection.

Air traffic controllers thus relieved from operational duty remain relieved until facility supervisory personnel have determined the extent, if any, of the employee's involvement.

If the employee was responsible for, or contributed to, an operational error, the following actions must be taken as a minimum prerequisite to reassignment to operational duty:

First, a discussion with the employee including a detailed and complete review of the incident and circumstances attendant to the occurrence.

Second, reevaluation of the employee on the position of operation to determine the necessity for additional training. If retraining is required, it will be conducted with emphasis on the weaknesses revealed during the investigation of the error.

Third, satisfactory completion of the two items above will be considered a recertification of control ability after a demonstration of skill level at least equal to that required for the appropriate portion of the sector/position checkout.

Disciplinary action, when warranted, will be taken consistent with penalties for offenses of comparable gravity found in FAA Conduct and Discipline Handbook 3750.4.

Mr. RANDALL. Will the gentleman suspend for a moment, please.

[Discussion off the record.]

Mr. RANDALL. Back on the record again.

Mr. BELANGER. It will be taken, when warranted, without regard to possible adverse effects on the FAA position in any subsequent lawsuits, enforcement proceedings, or similar actions.

The facilities also establish System Error Review Boards, charged with an indepth full-scale investigation of the incident. The review board is required to make their report within 15 working days of the occurrence. The facility chief must review the facility board's findings and submit his concurrence with the board's report or justify nonconcurrence.

Also, the facility chief will report the actions taken locally to prevent a recurrence.

The facility review board's report, along with the facility chief's comments, are reviewed at the regional and Washington headquarters level. These reports are analyzed at both levels to identify trends. Additional action needed to preclude recurrence is then initiated.

Before moving on, I would like to touch on the frequency of systems errors. For the last 6 years we have compiled the following statistics.

I will read now the number of operations in the air traffic control system on an annual basis, and the number of system errors for that calendar year:

In 1970, the total traffic handled was 76,685,367; the errors reported, 280.

In 1971, 75,385,434; system errors reported, 281.

In 1972, 75,318,448; system errors reported, 313.

In 1973, 79,902,785; system errors reported, 288.

In 1974, 80,832,595; system errors reported, 340.

In 1975, 83,579,971; system errors reported, 424.

69-694—76——2

In perhaps more understandable terms, that means a controller will be involved in an error every 42 years, or 1 error for every 2 million control instructions.

Most controllers never are involved in a system error.

The increase in system errors reported during 1975 is attributable, we believe, to the initiation of the aviation safety reporting program in May of last year. This program was discussed by Dr. McLucas last December.

Mr. RANDALL. Please suspend for a moment, please, sir.

[Discussion off the record.]

Mr. RANDALL. All right. On the record.

Proceed, sir.

Mr. BELANGER. I would like now to address the NTSB report on the near midair collision of last November.

Issued in conjunction with the report was safety recommendation No. A–76–3. The NTSB recommended to the FAA that we distribute the report to all FAA air traffic control personnel and discuss it in our training program.

I can report to you, Mr. Chairman, that the FAA is in complete agreement with this recommendation. We are moving speedily to implement it. Specifically we are taking the following actions:

1. Information contained in the report has been included in the national training program conducted at Oklahoma City.

2. A videotape briefing aid is in production for distribution to all air traffic control facilities with video replay systems. A mandatory briefing will be given in every facility, as well.

3. Copies of the report will be distributed to all air traffic controller personnel.

There is one comment on the NTSB report I would like to make. The report speaks of the high percentage of human failures in the ATC system. I want to clarify any misconception. I believe the high percentage refers to the high percentage of system errors—about 93 percent—involving human factors. It should not be understood that there is a significant percentage of human failures in the ATC system viewed overall as the statistics I provided earlier reveal.

You have also requested that we discuss the specific actions taken by the FAA as a result of this particular accident. I hope you appreciate that, while we share your desire that the facts be known, we wish to respect the privacy of the individuals concerned and the families. You have already covered that quite adequately, Mr. Chairman.

Mr. RANDALL. We will have some comment on that after a while.

Mr. BELANGER. Radar controller No. 1 was found by the NTSB to have failed to apply the prescribed separation minima and to have been distracted by secondary duties. Radar controller No. 2 was his relief, and the controller who cleared the American Airlines aircraft for immediate descent.

After the near collision, radar controller No. 1 was temporarily relieved of duty to begin to write his reports of what had happened. He had previously scheduled annual leave over Thanksgiving and took the time off. When he returned, he did not work an operational sector, but was detailed to the training department.

After the NTSB hearing, he reported for duty and was assigned as the D man, the manual controller. He was under very close—over the shoulder—monitoring. He was supervised the way we would treat a developmental or controller-trainee. He progressed subsequently to the point where he began to work the radar-tracker position, still under close supervision.

As his supervisors were satisfied with his performance, he was ultimately allowed to work independently with normal supervision. This occurred over a 3-week period. At this time, the controller indicated he had no problems associated with actually controlling traffic. In fact, his performance was errorless.

However, he indicated to his supervisors that, off duty, he was troubled by the accident and its aftermath.

Consultations were held with the assistant regional flight surgeon on duty at the Cleveland center. The controller was referred to a private physician and is presently on sick leave.

Radar controller No. 2 is back on regular duty.

Mr. RANDALL. Would the gentleman suspend for a moment.

[Discussion off the record.]

Mr. RANDALL. Proceed, sir.

Mr. BELANGER. I would like to generalize a bit about what is appropriate action to take vis-a-vis controllers involved in system errors. As I stated earlier, they are infrequent; they might be characterized as random phenomena. Since they are so isolated, it is difficult to generalize about what disciplinary or remedial action is appropriate in any specific instance.

Each controller has a different history and different levels of experience. There can be no hard and fast rule that, say, two system errors in a 6-month period mandate that the air traffic controller's certificate be revoked.

There can be a variety of reasons why a controller gets involved in a system error. Some deficiencies in a controller's performance are correctable by retraining. For example, a controller not able to work flawlessly in a high density center or tower may be transferred elsewhere where he can perform perfectly.

The point is that we examine each situation case by case. When I say we, I do not mean just the evaluation staff at FAA headquarters in Washington. It is the immediate supervisors of the controllers and their associates who can provide the best assessment of a controller's ability to perform after involvement in a system error. They can most easily detect operational difficulties or behavioral changes.

Therefore, it is on the supervisor's judgment that we rely most in deciding what is appropriate action. Disciplinary action is not taken in every case. However, an employee who deviates from prescribed standards and procedures through negligence or carelessness can expect appropriate disciplinary action.

Recognizing that we cannot eliminate human errors, we are working to minimize them. One way is to try to develop automated equipment that assumes the human tasks which are most likely to produce human error.

We have done that by improving the radar equipment which identifies the radar target. Today, we have radar data processing where a computer puts the tags on the targets.

Another kind of approach which we can take is to minimize the risk that a human error will result in a system error. In other words, we can try to catch the error before it goes too far and creates a safety hazard. This kind of system is illustrated by our conflict alert function.

The conflict alert program was designed to meet three objectives. The first and most important was to alert the controller to a potential problem, which could result in a midair collision, in time for the controller to take action to avoid such an occurrence. It was also intended to alert the controller to a potential conflict between the two aircraft in time for instructions to be issued to the pilot and accomplished in a manner which does not require abrupt evasive action which might result in injury to passengers or aircraft damage. The third but lesser goal was to alert the controller in time to take action to prevent one aircraft from intruding into the protected airspace of another aircraft.

We believe that, had conflict alert been operational at the Cleveland center on November 26, 1975, the near collision between the airliners would not have taken place.

Before I conclude, Mr. Chairman, I would like to comment on the role of the medical personnel of the FAA in minimizing human errors in our air traffic control system.

The medical effort begins with the development of selection criteria in terms of aptitude and emotional stability. It also involves prehire and annual comprehensive medical evaluations. In each of our air route traffic control centers we have an assistant regional flight surgeon who, among other things, is available for counseling and initial treatment of on-the-job illness or injury. This would include post-incident medical assistance as needed in individual cases.

In addition to the clinical approach which I have described, there is an FAA medical research program, a significant portion of which deals with the air traffic control system in areas such as controller stress, effects of shift rotation, improved selection criteria, effects of age on performance, causes of health change, and so on.

This concludes my prepared statement, Mr. Chairman.

My associates and I will try to address any questions you might have.

I would like to offer for the record the relevant FAA handbooks and manuals relating to air traffic system errors.

Thank you very much for the opportunity to appear.

Mr. RANDALL. Thank you, Mr. Belanger.

I think, as a starting point, you might tell us a little more about this conflict alert function which you say is now operational at all en route centers.

Mr. BELANGER. Yes, sir. The conflict alert function is currently operational at all 20 domestic automated centers. At two of them, it is down to 18,000 feet. At 16 centers, the function is down to 12,500 feet. At the other two, it is down to the ground.

Mr. RANDALL. By functional, you mean it works above these different altitudes?

Mr. BELANGER. Yes, sir.

Mr. RANDALL. How many are above 12,500 feet?

Mr. BELANGER. Sixteen.

Mr. RANDALL. That does not add up.

You have 16 at 12,500, and 2 down to the ground. Where are the other two?

Mr. BELANGER. There are two centers that cover conflict alert from the ground up to infinity.

Mr. RANDALL. And you have 16 up to 12,500 feet.

Mr. BELANGER. I have explained it poorly.

Sixteen of them cover from 12,500 feet above the ground up to infinity. In two, it is from 18,000 feet above the ground up to infinity.

Mr. RANDALL. Thank you.

You might enlighten us a little about what you mean by coverage.

Mr. BELANGER. Those are the altitudes above which the function is operating.

Mr. RANDALL. Nothing below that?

Mr. BELANGER. That is correct as far as conflict alert is concerned.

We are moving ahead to bring all 20 centers down to the ground; to cover from the ground on up.

Mr. RANDALL. In other words, you have only two at this point that will go all the way down to the ground?

Mr. BELANGER. That is correct.

Mr. RANDALL. What must you do to give the others this same capability?

Mr. BELANGER. It involves software programing for adaptation at each of the center sites.

Mr. RANDALL. What are you doing about that?

Mr. BELANGER. We are moving ahead as quickly as we can.

Mr. RANDALL. You have quite a way to go on some of them here. You have the greater part of the distance to go yet.

Mr. BELLANGER. Actually the air space where it is operating already constitutes the air space in which the majority of our traffic is.

Mr. RANDALL. En route?

Mr. BELANGER. That is right—en route.

Mr. RANDALL. Do you have any intention of installing conflict alert in terminal control facilities?

Mr. BELANGER. Yes. We have a research and development effort moving forward to provide the same program for the automated terminal facilities.

Mr. RANDALL. In this near collision on November 26, 1975, were any terminal facilities involved at all, or did all of this occur within one en route center? Is that where the problem began?

Mr. BELANGER. On the incident you are referring to——

Mr. RANDALL. Accident, not incident.

Mr. BELANGER [continuing]. That is correct.

Mr. RANDALL. No terminal facilities.

We have only had this subcommittee now in its second year, and as far as I know we have never been provided with any comprehensive map showing the jurisdiction of the various centers.

We went to Leesburg center a few years ago, and we have been down to one of the others—I believe you have an en route center somewhere in the Middle West. Is it in Denver or in Kansas City?

Mr. BELANGER. Yes. We have one in New York.

Mr. RANDALL. We would like to know where your dividing lines are—where the hand-offs of traffic between centers occur.

Mr. BELANGER. We would be happy to provide this material.

Mr. RANDALL. I think you should provide it. So far as I know, it

has never been provided. Maybe it was in the past when Jack Brooks chaired this subcommittee. I do not know. I might indicate that Jack is intensely interested in these hearings, and personally asked that we proceed on this, and proceed diligently.

I think we need that map.

We have been led to believe that this near collision occurred almost over Lake Michigan. They keep referring to it as Carleton, Mich.

Was it actually over the water?

Mr. BELANGER. No, it was not.

Mr. RANDALL. Where was it?

Mr. BELANGER. I will defer to Mr. Ryan who can give you a more precise location.

Mr. RYAN. It occurred 23 miles west of Carleton.

Mr. RANDALL. What does that mean with respect to the boundary of Lake Michigan? Was it close to that, or over it, or not? The press indicated that it was right over the lake.

Mr. RYAN. It was a misunderstanding. It was not.

Mr. RANDALL. Where is Carleton, Mich.?

Mr. RYAN. It is approximately 60 miles east of Detroit. But I think I can provide more information.

Mr. RANDALL. Sixty miles east of Detroit?

Mr. RYAN. Let me check it out.

Mr. RANDALL. That's all right.

We understand now from staff that you may have supplied us with a map of the jurisdiction of the Cleveland center. We would like to have maps of the jurisdictions of all of these en route centers.

Mr. BELANGER. We will be happy to provide that.

Mr. RANDALL. You referred, on page 2, to FAA Order 8020.3A. It is entitled the "Air Traffic System Error Reporting Program."

You indicate you have supplied the subcommittee with that. One would almost have to hire a new staff to find out what you have in there, but I will ask you one or two questions.

Does that have anything at all to do with your new program that was instituted with NASA—the immunity program?

Mr. BELANGER. No.

Mr. RANDALL. Is it coordinated with that? Is it a part of that?

Mr. BELANGER. It is a program that has been in existence within the FAA for many years.

Mr. RANDALL. All right. For how many years?

Mr. BELANGER. In various iterations—30 years.

Mr. RANDALL. I was interested in a comment that you made at the bottom of page 2, when you referred to system errors. You said that a system error is an operational error in which there is a failure of the equipment, or a human or procedural failure. And then you make a statement which you later try in several ways to qualify and correct: "You should realize that system errors don't equate to safety hazards."

If they don't, what do they equate to?

Mr. BELANGER. They equate to a potential safety hazard. They occur when a controller does not maintain the prescribed separation minima set forth in our handbook.

Mr. RANDALL. Potential means simply that the accident did not happen through some providence of some kind?

Mr. BELANGER. No. It means that he could have taken an action to prevent it, but the required separation standards still did not exist.

Mr. RANDALL. Did not exist? The standards existed, surely.

Mr. BELANGER. In other words, he did not maintain the separation required by the standards, but that does not mean that the hazard necessarily existed.

For example, our radar separation standards are 5 miles. The controller could have inadvertently had the aircraft 4 miles apart. There is nothing unsafe about aircraft 4 miles apart if it is done by intent.

Mr. RANDALL. You are talking about specified minimums there.

Mr. BELANGER. That is right.

Mr. RANDALL. But you just made the statement, "You should realize that system errors don't equate to safety hazards." That is not quite altogether true, is it?

You used the word "potential." You were just lucky that it didn't happen?

Mr. BELANGER. Not necessarily lucky.

Mr. RANDALL. Well, wasn't it just lucky that someone was looking after them.

Mr. BELANGER. There is a built-in buffer in the standards themselves that permit a certain amount of leeway.

We recognize that, if the controllers plan on 5 miles, they could well end up with 4 miles, but we classify it as a system error because they did not meet the standard that we prescribed.

Mr. RANDALL. You indicate that, after one of these accidents, the chief of the facility designates a team. Who is the chief of the facility? I assume you mean the one out in the region? Or it is you?

Mr. BELANGER. In the air traffic control system, we have 800 individual facilities, that is, flight service stations, towers, or centers.

Mr. RANDALL. In this particular matter, you are referring to the chief of the facility within whose jurisdiction an accident occurs.

Mr. BELANGER. Wherever the occurrence was.

Mr. RANDALL. That would be Detroit, would it not?

Mr. BELANGER. No; this would be the Cleveland center which has jurisdiction over that airspace.

Mr. RANDALL. All right.

Who is the chief of the Cleveland center? Is that Mr. Ryan?

Mr. BELANGER. That is Mr. Ryan.

Mr. RANDALL. You say that he immediately designates a team to analyze and reconstruct the actual or suspected error and then telephones a preliminary analysis of their investigation to Washington headquarters within 6 hours of the occurrence. Is that right?

Mr. BELANGER. The fact that there was an occurrence is phoned in immediately.

A preliminary analysis in more detail must be phoned in within 6 hours.

Mr. RANDALL. All right. We would like to have a copy of that preliminary analysis.

Mr. BELANGER. I do not have that in hand, Mr. Chairman.

Mr. RANDALL. You are going to provide it for us?

We are putting it clearly on the record that we want that preliminary analysis.

Mr. BELANGER. We certainly will provide it.

[The information referred to follows:]

F-1 Daily Briefing—Preliminary Analysis

Reporting facility: Cleveland Center.
Date and time: November 27, 1975 at 0023Z.
Involved aircraft: AA182/DC10 and TW37/L1011.
Location: 30 miles west of Carleton (CRL) at FL350.
Probable cause: Failure of the controller to note the impending conflict and take appropriate action to resolve it.

SUMMARY

TW–37 was proceeding westbound, level at 350. AA182 was proceeding eastbound, climbing to flight level 370. At 0021Z there was a change of controllers at the position (Wayne High Sector) without proper briefing having been effected. At 0023Z, the controller notices the impending conflict and descends AA182 from FL34.8 to FL330. Controller issues opposite direction traffic to TW37 (12 o'clock, 1 mile). AA182 queried the controller reference the traffic; and shortly thereafter, requested a clearance to land at Detroit Wayne Airport (DTW) due to injured persons on board.

JFK NTSB INTERVIEWED THE PILOT OF AA–182

The pilot said he had been cleared to climb from FL330 to FL370. At FL350 they were almost on top and could see stars at a 45 degree angle from horizon. When they spotted the stars they saw aircraft navigation lights—at that moment, they were cleared to descend immediately. The Captain at first pushed the nose over slightly but the traffic began filling the windshield and he pushed the nose over harder. The traffic completely filled the windshield and pilot estimates they missed 20 to 100 feet. He descended from FL350 to FL330 in 30 seconds (4,000 feet per minute).

Twenty-eight crew members/passengers were injured. Most of the damage was from the second push over. The seat belt sign was on—they were serving meals. 10 stews injured, some passengers injured that slid out from under their seat belt—some from flying objects. Pilot filed NMAC on ground.

TWA never saw the traffic.

NEAR-MISS PLANE HAD EARLIER SCARE

Chicago (UPI)—The American Airlines jumbo jet that almost collided with another plane near Detroit Wednesday had scared an air controller at O'Hare International Airport just hours earlier, the Federal Aviation Administration said yesterday.

An FAA investigation of the Chicago incident showed the American plane got fairly close to another aircraft—but never so close that there was anything to worry about.

"The minimum separation is 1,000 feet, and it (the distance between the planes) was near the minimum," an FAA spokesman said. "If it had been less, it would have been something to pursue further.

"All this hullabaloo would not have occurred if it hadn't been for the near-miss in Michigan later," the spokesman said.

The plane in question was American flight 182 from San Francisco to Newark, N.J., via Chicago. It was piloted by Captain C. A. Evy of New York.

According to a report filed by a controller at O'Hare, flight 182 was given permission to begin a descent prior to landing, but then was told to ascend again to 6,000 feet because another jet was in the way.

The controller said in his report the two planes came within 500 feet of each other. He said when he told flight 182 to return to 6,000 feet, the pilot responded, "Descend to 3,000 feet."

The controller said he answered, "Negative, negative. Maintain 6,000 feet. There's traffic right in front of you at 5,000 feet."

The response from the pilot was, "I see the traffic at 5,000," and the plane climbed back to 6,000 feet.

The FAA spokesman said that through tape recordings of that conversation and a computer reconstruction of the traffic pattern at the time, it was determined the two planes never came closer than 1,000 feet of each other.

A few hours later, flight 182 had to make a sudden drop from 35,000 feet to 33,000 to avoid colliding with a TWA jumbo jet 20 miles southwest of Detroit Metropolitan Airport.

That incident is under investigation by the National Transportation Safety Board.

Mr. RANDALL. You say it has to be done within 6 hours, and that this was done within 6 hours of this particular incident?

Mr. BELANGER. This particular situation was a little bit different in that it was declared an accident by the National Transportation Board which took the investigation and the analysis fundamentally out of our hands and into their hands.

Mr. RANDALL. Yes, we understand that. But, in the meantime, you still had to comply with your requirement here.

Mr. BELANGER. That is correct.

Mr. RANDALL. We would like to know what you did.

You have this report, or will have it?

Mr. BELANGER. We will have it.

Mr. RANDALL. We are not going out to subpena things. We are just asking you to give it to us. We think you will.

Mr. BELANGER. We certainly will.

Mr. RANDALL. On page 3, you say, "Air traffic controllers who appear to be directly involved are temporarily relieved of operational duty immediately following discovery of the error."

The question of the Chair is, for how long do you temporarily relieve them?

Mr. BELANGER. The relief from the operating position is as long as is required to determine what might be considered the probable involvement. If the controller has no involvement, it can well be that he is returned to duty. If he has direct involvement in the error, then he goes through what we term a recertification process.

Mr. RANDALL. In other words, temporarily does not mean anything. It just depends on how the facts develop? You do not have a standard timetable of any kind?

Mr. BELANGER. The timetable is that he is taken off the position as soon as we can practically get relief available for him and we can start investigating. The team comes out and starts investigating the preliminary facts, and that usually gives us an idea.

Mr. RANDALL. The team comes out from where, sir?

Mr. BELANGER. The team is generated by the local facility. They have certain designated people who act in the investigative capacity for a situation of system error.

Mr. RANDALL. All right. Maybe this question should go to Mr. Ryan.

Mr. Ryan, what did you do? What kind of team did you generate?

Mr. RYAN. Sir, on November 26, at approximately 7:30 in the evening, I was called by the assistant chief on duty at Cleveland center and advised that we had a possible system error and a possible accident as an American DC-10 was diverting to Detroit.

At that time, I left my home and reported to the Cleveland center and arrived at approximately a quarter to 9. Prior to my arrival, the assistant chief in charge, who is the gentleman who is in charge of the total Cleveland center when I am not there—in other words, the operational watch-standing group—had already mobilized the group.

Mr. RANDALL. Who is he? I don't think we can get hurt by naming names here.

Mr. RYAN. Specifically the gentleman?

Mr. RANDALL. Yes.

Mr. RYAN. He was Stanley Levine.

Mr. RANDALL. What did he do?

Mr. RYAN. He mobilized what we call the go-team, which is a team supervisor; the assistant chief, Mr. Levine——

Mr. RANDALL. Slow down. He mobilized a team.

Mr. RYAN. He mobilized the go-team.

The go-team consists of the area supervisor, of which there happen to be four on duty at all times except during the midnight watch.

Maybe I can explain this. At Cleveland center we have four basic areas of operation—A, B, C, and D.

Mr. RANDALL. Do these areas radiate out from Cleveland?

Mr. RYAN. No.

Mr. RANDALL. It is an en route center, so you cut it up like a pie?

Mr. RYAN. Similar to a pie.

The A area is essentially the Cleveland area.

The B area is a northeast section of Cleveland center which covers Buffalo and where we adjoin Boston.

The C area is essentially the Pittsburgh area.

The D area is essentially the Detroit area.

Mr. RANDALL. This gentleman, Mr. Levine, mobilized the go-team, and this go-team consisted of an area supervisor and who else?

Mr. RYAN. And a team supervisor.

Mr. RANDALL. Who else was on the team?

Mr. RYAN. Do you want their names?

Mr. RANDALL. No, I just want to know what they do and how many there were.

Mr. RYAN. We are talking about the two people, and we are also talking about——

Mr. RANDALL. How many are involved in the go-team?

Mr. RYAN. Three people; the assistant chief, the area supervisor, and the team supervisor.

Mr. RANDALL. In the order of rank, I suppose the area supervisor would be on top, wouldn't he?

Mr. RYAN. The assistant chief is top.

Mr. RANDALL. The assistant chief of the whole facility?

Mr. RYAN. Right.

Mr. RANDALL. He is No. 2 to you?

Is that correct?

Mr. RYAN. Right.

Mr. RANDALL. Then you have got one of four area supervisors. Which area would that be?

Mr. RYAN. Area D.

Mr. RANDALL. That is the area supervisor.

Then you have a team chief. What does he do?

Mr. RYAN. We have 500 full performance controllers and approximately 80 controllers at Cleveland center at various stages of development. These controllers are divided into 49 different teams. Each team has a team supervisor, approximately 14 teams working each day and evening watch—one working the mids, and two off.

So we are talking about approximately 16 team supervisors on duty at Cleveland center at that time.

Mr. RANDALL. At which time? At the time of the accident?

Mr. RYAN. Yes, sir. Approximately 16 team supervisors of which four are designated on a part-time basis through rotation as being area supervisors.

Mr. RANDALL. All right.

You got to the center at perhaps a quarter of 9, I think you said. Your assistant chief had gone ahead with this so-called go-team.

Did you sit in on that, sir?

Mr. RYAN. I spoke with them, but their primary function is to get the preliminary information, for instance, statements from those personnel involved in the occurrence.

Mr. RANDALL. Please answer my question. Did you or did you not participate in the go-team activities?

Mr. RYAN. No, I did not.

I was briefed by the team on the activity that they had conducted.

Mr. RANDALL. But you are the boss there?

Mr. RYAN. Yes, sir.

Mr. RANDALL. Well, according to Mr. Belanger, we still have to have this report put in within 6 hours.

Did you get it in within 6 hours? What happened to it?

Mr. RYAN. Yes, sir. After I was briefed by the go-team and they took the preliminary statements, we did within 6 hours call the required report in to headquarters in the region.

Mr. RANDALL. Who is that?

Mr. RYAN. It goes to the system command center in the FAA building.

Mr. BELANGER. They work for me.

Mr. RANDALL. That is what I thought. You are the titular head of the whole thing, are you not?

Mr. BELANGER. Yes, sir.

Mr. RANDALL. When did you look over the report?

Mr. BELANGER. I looked it over the following morning. I received a telephone notification during the night, and I looked over the details in the morning.

Mr. RANDALL. Mr. Ryan, since you were on the spot, do you know if radar controller No. 1 was relieved right then and there?

Mr. RYAN. Yes, sir.

Mr. RANDALL. And he remained, so-called temporarily, relieved until when?

Mr. RYAN. Until December 14.

Mr. RANDALL. Mr. Belanger has testified that when any employee seems to be responsible for, or seems to have contributed to an operational error FAA must take the following actions as a minimum prerequisite to reassignment to any kind of operational duty: a discussion with the employee, including the details and a complete review of the incident and circumstances.

Who had this discussion and when did that discussion take place? Or who knows?

Mr. RYAN. I had the discussion with controller No. 1, and his assistant chief and his team supervisor were present.

Mr. RANDALL. When did you do that?

Mr. RYAN. This happened on December 11.

Mr. RANDALL. You did not get around to it until December 11? I thought the accident occurred on November 26.

Mr. RYAN. Sir, we had had preliminary discussions about the accident prior to that. In fact, on November 26, that evening, I spoke with both controllers at which time they advised me about their involvement in the accident.

Mr. RANDALL. You now say this discussion occurred on November 26. You spoke then with the radar controllers. But you just got through telling us that the required discussion took place on December 11. Did you have any discussions in between?

You obviously did not do very much on November 26 because you did not get there until 9. This happened late in the day.

What did you do on November 26?

Mr. RYAN. On November 26, I spoke with the two controllers.

Mr. RANDALL. No. 1 and No. 2?

Mr. RYAN. Yes, sir. I wanted to find out what had happened from them. I had already been briefed by the go-team.

Mr. RANDALL. Then your statement was not quite correct. Did you, or did you not have this detailed instruction that night? You also say you had a discussion on December 11, That was your statement. Then you say that you had a talk with the two controllers on the 26th. You had a discussion both times?

Mr. BELANGER. Mr. Chairman, if I might interrupt. I do not want to put words in Mr. Ryan's mouth——

Mr. RANDALL. I don't want you to, Mr. Belanger. Let us interrogate Mr. Ryan, if you please.

How long did you talk to these gentlemen on the 26th?

Mr. RYAN. Approximately 45 minutes.

Mr. RANDALL. You did not wait until December 11 to talk to them? You talked to them that night. That makes sense.

Mr. RYAN. That I did, sir. But I thought you meant in a more formal situation with the supervisors there where we went step by step in depth.

Of course, on the 26th I spoke with both of them. That was one of the primary reasons for me going to the center.

Mr. RANDALL. All right. Now we are coming down to it.

So you had a sort of formal hearing on December 11. Everybody got together—all the supervisors and everyone were there on the 11th?

Mr. RYAN. Yes, sir.

Mr. RANDALL. Mr. Belanger, you can participate now, if you will.

Would you get out your handbook on FAA Conduct and Discipline and turn to 3750.4. I would like for you to read and detail the various disciplinary actions and when they are warranted, and talk about the penalties, if any, which should follow.

Are we all together on this? Is this page 17 of the document dated July 1, 1974?

Mr. BELANGER. I believe we are.

Mr. RANDALL. The FAA order entitled "Conduct and Discipline"?

Mr. BELANGER. Yes.

Mr. RANDALL. The document was originally issued June 10, 1969, and was reprinted on July 1, 1974.

Mr. BELANGER. Yes, sir.

Mr. RANDALL. We are on page 17, is that correct?

Mr. BELANGER. That is correct.

Mr. RANDALL. At the head of that, is the title, "Maintaining Discipline."

Now we will see what we should read into the record.

I think we can expedite this a little bit. This is true of just about all implementations by the various bureaucracies—a complex implementation. We will try to simplify as best we can.

Are there two kinds of disciplinary actions—one informal and one formal? And what is the dividing line between the two?

Mr. BELANGER. That is correct.

The written reprimand is the dividing line. The written reprimand constitutes formal action. Anything other than that, such as an oral reprimand——

Mr. RANDALL. What was that? Moral?

Mr. BELANGER. An oral reprimand.

Mr. RANDALL. The written reprimand is the dividing line.

Is that correct?

Mr. BELANGER. That is correct.

Mr. RANDALL. In other words, an oral reprimand is like patting him on the back of the hand—like saying, just do not do it again.

Mr. BELANGER. I don't like to categorize it in that manner.

Mr. RANDALL. Of course, we cannot categorize in that way any error which jeopardizes 306 lives. But we are going to try to categorize the various disciplinary actions.

Mr. BELANGER. An oral reprimand is less severe than a written reprimand.

Mr. RANDALL. About 30 pages into FAA Order 3750.4, entitled "Conduct and Discipline," we finally get down, on page 6 of an appendix, to a left-hand column with the heading "Nature of Offense."

Then, from left to right the columns have the heading, first offense, second offense, third offense, and so forth.

In that far left-hand column, next to the Arabic numeral 17, there are these words: Negligent or careless work performance resulting in waste of public funds, damage to material, delay in production, injury or loss and then these words—or danger of loss to life.

Then, under that first offense column—and I am asking you to tell us if this is the section that would apply to this accident—you have the words, "Written reprimand," and then the words, "to removal." I assume this means you can go all the way from issuing a written reprimand to removing the employee.

Is that correct? Are we talking about the right thing?

Mr. BELANGER. That is correct.

Mr. RANDALL. This is from page 6 of table 1 in appendix 2. There is a reference in the third paragraph of page 17 of the Conduct and Discipline Order that the penalties are listed in table 1 of appendix 2.

That is where we are at.

Mr. BELANGER. That is correct. That would be the paragraph that is applicable.

Mr. RANDALL. Mr. Belanger, you startled us a little at the top of page 5 when you say that, after you get through with this facility review board, and have reviewed all the comments of the facility chiefs at the regional and Washington levels, reports are analyzed at both levels to identify trends.

What do you mean by "trends"? Are these good or bad trends?

Mr. BELANGER. Unfortunately, the trends in identifying system errors are trends that caused the error. By identifying the cause, we hope to institute remedial action, primarily from the Washington office.

Mr. RANDALL. The trends in procedures?

Mr. BELANGER. That is correct.

Mr. RANDALL. What procedures are these?

Mr. BELANGER. The air traffic control manuals are filled with procedures on how you go about controlling traffic.

All through our system we also try to institute fail-safe procedures. For example, we found that errors in identification were being made at the handoff point. We instituted a national procedure that would require every sector internally to be identified.

Mr. RANDALL. Would you back up, for a moment, please?

You say the manuals are filled with procedures. That is certainly true. We found that right here. They are filled with regulations or procedures.

Mr. BELANGER. Procedures on how to control traffic.

Mr. RANDALL. Then you made an interesting comment. You said you attempt to find fail-safe procedures.

Mr. BELANGER. That is correct.

Mr. RANDALL. When I asked you to slow down, you said "We found that many of the failures are at the handoff point." Do you mean the handoff from en route to terminal?

Mr. BELANGER. It could be en route from terminal internally within a sector, or sector to sector within a center, that the aircraft had been misidentified.

Mr. RANDALL. That is a new facet—from sector to sector within a center? Are you talking about the A, B, C, and D areas that Mr. Ryan referred to?

Mr. BELANGER. We are talking about a procedure we had one time where a controller, as he handed off the aircraft to the next sector, would say for instance, that American 210 is entering the sector over Carleton. The controller would look on his scope and see the target there and say, "Roger, I have got him."

Mr. RANDALL. Oh, you divide your en route centers into sectors. You even divide these areas—the A, B, C, and D areas—down into sectors?

Mr. BELANGER. Yes; although we have only 20 centers in the system, we have about 800 sectors.

In this instance, the method we went about going in the fail-safe from a national procedure on that, was to require, we required the accepting controller to reidentify the aircraft even though the other controller told him who it was and where it was.

Mr. RANDALL. Yes; I understand.

Your testimony is that you believe one of the problems is in this handoff?

Mr. BELANGER. No, I am using this as an example of a problem that we previously had.

Mr. RANDALL. You have solved that?

Mr. BELANGER. Yes, we have.

That one is pretty well under control now.

I use this as an example of trends that we determine to exist and institute a national procedure to correct.

Mr. RANDALL. I asked how you identify trends and you said, in effect, that you try to identify where the problem is, and you say that it is at this handoff point.

Mr. BELANGER. This was a problem that was in evidence at one time. We have corrected that.

Mr. RANDALL. For the record, it would be well for you to say how you corrected it.

Mr. BELANGER. We corrected it by requiring the accepting controller, even though the releasing controller had told him who the airplane was and where it was, to reidentify it by having the pilot use his beacon or transfinder code return to use the ident feature.

In other words, even though the accepting controller saw a target and had been told by the releasing controller who the aircraft was,

where it was, the receiving controller had to confirm that this identification was indeed this particular aircraft by communications with the pilot, now, instead of the other controller.

Mr. RANDALL. What you have just told us, Mr. Belanger, makes some sense. There is an indication that you are trying.

I have to say that after some of these things have happened—not merely the accident over Carleton, but there have been a sequence of them right in a row that has shaken the confidence of a lot of people when they are up in the air. We know. We have received a ton of mail expressing this fear. We want to know what the FAA is doing.

You say here that there is a requirement for a controller to reidentify an aircraft even after he has been told that he now has control over it.

But the important thing is that you do not rely solely on these controllers in the handoff. You also communicate with the pilot.

Mr. BELANGER. We doublecheck with the pilot. The controller told the controller where the aircraft was, and we doublecheck with the pilot now.

I do not want to mislead you and say that this is something that has happened since that accident. I am using this as an illustration of a trend that we identified nationally, with respect to which we took corrective action.

Another problem we had that we identified as a national trend was that the relay of the altitude information—this was prior to the alpha-numeric——

Mr. RANDALL. Prior to what, sir?

Mr. BELANGER. Prior to the electronic read-out of the altitude.

Mr. RANDALL. That was not what you said the first time. The alpha—please repeat what you said the first time.

Mr. BELANGER. Alpha-numeric.

Mr. RANDALL. The alpha-numeric.

Mr. BELANGER. We found that sometimes the pilot was at an altitude different than had been transmitted to the next sector of the next center. Again, rather than accepting only the releasing controller's word, we had to institute a national procedure where, on every contact, we had the pilot verify what altitude he was. So, again, we had a doublecheck.

Mr. RANDALL. Thank you.

Would the gentleman suspend, please?

[Discussion off the record.]

Mr. RANDALL. Back on the record.

Mr. Belanger, could it be said that you are the overall manager of the entire U.S. air traffic system? And, if not, who is?

Mr. BELANGER. I have technical direction of the air traffic system within the United States. The immediate line authority of the facilities that are in each region rests with the regional director, and further delegated to the chief of the air traffic division, which is, in this case, Mr. Wubbolding of the Great Lakes.

My authority is in the technical direction only; that is, procedural. I have no line authority over any of the field facilities.

The Administrator has line authority over the regional director, but the technical direction of how we do business, how we go about it, what procedures we use, and things of that nature, rest with me.

Mr. RANDALL. How far have we decentralized this system? Mr. Wubbolding is at the Great Lakes regional office—is he the absolute boss over the whole system? Do you simply give him a few technical details? Have we decentralized the system to that point? Isn't there some FAA official managing the whole system other than simply giving technical direction? There has to be somebody up there.

Mr. BELANGER. I would have to say that I am the one.

Mr. RANDALL. You are. You shouldn't downgrade yourself and just say you are responsible for a few technological details. You are Mr. Ryan's boss, aren't you?

Mr. BELANGER. No, I am not his boss.

Mr. RANDALL. Who is his boss? He doesn't have any?

Mr. BELANGER. The regional director in the Great Lakes region is his boss, and that regional director reports directly to the Administrator.

Mr. RANDALL. I was pointing at Mr. Wubbolding. Is he the boss?

Mr. BELANGER. He is the boss of the air traffic facilities in the Great Lakes region.

Mr. RANDALL. Oh, now we have a regional director of FAA, and he is the boss where this accident is concerned? This is what I am trying to find out. Who is he?

Mr. BELANGER. Mr. John Cyroki is the regional director of the Great Lakes region.

Mr. Wubbolding is in charge of all the air traffic control facilities in the Great Lakes region.

Mr. RANDALL. He is the air traffic director right under Mr. Cyroki?

Mr. BELANGER. Right.

Mr. RANDALL. We had a little experience up in JFK in connection with the Concorde. We went up there and we found out that you have one man who seemed to be running the whole thing. I guess he was a regional director like Mr. Cyroki.

Mr. BELANGER. Yes.

Mr. RANDALL. A nice gentleman. He was involved in an accident right after that. Are we talking about the same one?

Mr. BELANGER. That is correct.

Mr. RANDALL. So is he the one who is really the head of all air-traffic control. And Mr. Wubbolding is responsible as far as air-traffic control is concerned?

Mr. BELANGER. That is right.

Mr. RANDALL. Then you come down to folks like Mr. Ryan?

Mr. WUBBOLDING. I am Mr. Ryan's supervisor.

Mr. RANDALL. All right.

On page 5, Mr. Belanger, when you mention the increase in system errors reported during 1975—you jumped from 340 to 424 with only 3 million additional traffic miles. Are you talking about millions of miles here?

Mr. BELANGER. No, those are millions of operations.

Mr. RANDALL. What is an operation, then?

Mr. BELANGER. One aircraft movement—landing or takeoff—is movement of the aircraft. It has nothing to do with miles.

Mr. RANDALL. I see.

Mr. BELANGER. How many aircraft flew.

Mr. RANDALL. In other words, these are individual planes?

69-696—76——4

Mr. BELANGER. That is right.

Mr. RANDALL. It is the same plane taking off and landing again and again in a lot of different places?

Mr. BELANGER. Yes.

They are individual flights.

Mr. RANDALL. Anyhow, you jumped from 340 to 424 in 1 year?

Mr. BELANGER. That is correct.

Mr. RANDALL. Those were the system errors that were reported.

Mr. BELANGER. That is correct.

Mr. RANDALL. Do you have any knowledge of how many were not reported?

Mr. BELANGER. No, I do not have any knowledge.

Mr. RANDALL. Does anybody? Obviously not, I guess.

Mr. BELANGER. No.

Mr. RANDALL. That is where my question is leading to.

You say this increase is attributable to the initiation of the aviation safety reporting program in May of last year.

Mr. BELANGER. Yes. We believe that influenced the increase.

Mr. RANDALL. Dr. McLucas had been in here, and he had only been aboard for about a week or two, I think. Less than that, when he came here.

Are you talking about the immunity program here?

Mr. BELANGER. That is correct.

Mr. RANDALL. Let us talk a little about that.

Who is in charge of that?

Mr. BELANGER. I am not in charge of that, but I am familiar with it and have an association with it.

Mr. RANDALL. Dr. McLucas did not tell us very much about it. He told us it was in existence. Who is the best witness to tell us about that?

Mr. BELANGER. I believe I could probably do a pretty good job of explaining the program.

Mr. RANDALL. You are being modest. You know all about it, but you do not want to talk.

We are going to ask you a few questions.

Is this the program involving NASA?

Mr. BELANGER. Yes, sir. It is.

Mr. RANDALL. Is there some kind of a contractual relationship between you and NASA?

Mr. BELANGER. That is correct.

Mr. RANDALL. Then you are the man. You know what is going on.

Can you tell how many system errors NASA has reported? Is this part of the 424?

Mr. BELANGER. The NASA program has not taken over as yet.

Mr. RANDALL. Oh? When are they going to? Are they running a little slow?

Mr. BELANGER. I believe they begin in April.

Mr. RANDALL. It took them a year to get in gear?

Mr. BELANGER. But the reporting program is still going on internally. It is being reported to a confidential group within the FAA. That is why I say I am not in charge of it. It is a small group reporting directly to the Administrator.

Mr. RANDALL. In other words, from May until April, some time a month or two from now, there has been a confidential FAA immunity program?

Mr. BELANGER. That is right.

Mr. RANDALL. At least, we hope it has been confidential.

Mr. BELANGER. That is correct.

Mr. RANDALL. What is the name of that small group?

Mr. BELANGER. It is called the aviation safety reporting group.

Mr. RANDALL. Who is in charge of that group?

Mr. BELANGER. The name of the gentleman in charge of the group is Mr. Youngren.

Mr. RANDALL. Who is he? Where did he come from and what has he been doing there?

Mr. BELANGER. I am not completely familiar with his background, Mr. Chairman.

Mr. RANDALL. How many are in this group? You say it is a small group.

Mr. BELANGER. I believe there are five or six.

Mr. RANDALL. Is he the chairman of it?

Mr. BELANGER. Yes, I believe that is a reasonable description of his function.

That group has one representative from air traffic, a representative from flight standards, a representative from airports.

Mr. RANDALL. I know you are going to say that you do not have the information now, and I think that is justified because you did not know to what depth we are inquiring here. But we would like to know whether this big increase in reported errors during the time that you tell us about here, from some unspecified date in 1974 to some unspecified date in 1975, and this program was started in May——

Mr. BELANGER. May of 1975.

Mr. RANDALL [continuing]. Was this big increase after the confidential reporting system was instituted?

Mr. BELANGER. Yes, it was.

Mr. RANDALL. In other words, if you can guarantee confidentiality, and get it clear out of the department—you might get a lot of errors reported.

The Chair was personally involved in an incident that was never reported. We had to dig real hard over at O'Hare to find out what happened. We finally found out. But it had not been reported at all anywhere in FAA.

Mr. Belanger, I guess one of the things we are trying to do this morning is to try to be as certain as possible that an accident of this kind does not happen again—a horrible accident like this.

The first thing we want to do is to find out who is responsible and what has been done with the person who was responsible, in accordance with your regulations.

But then I suggest again that the other objective is to do everything we can to see that it doesn't happen again.

In your page 6, you say that you are in agreement with the recommendation of the National Transportation Safety Board.

I want the record to show that the chairman of that board, after his preliminary investigation, called the chairman of this subcommittee at home and told me exactly what happened. We found out what

happened pretty soon after it was over, because we felt we had an obligation and a responsibility to find out. That is why we are having this hearing this morning, and we may have to have some more.

You say that you are in agreement with this National Transportation Safety Board report; that you are in complete agreement with NTSB recommendations and that those recommendations will be speedily implemented. Everything is fine up to this point. And you say that you are taking some followup actions.

One of these is that you have included the report in the national training program at Oklahoma City. We have been out there. We might have to go out there again. Last year they told us they were going to do some things, and the year has passed and they have not done any of the things that they told us they were going to do. Not one thing.

But that is not your problem.

Then you say you have a video tape that you are going to replay and distribute to all air traffic facilities, and that there will be a mandatory briefing in every facility as well. We would like to know on what dates and in what centers that mandatory briefing will be, and who attends those briefings.

Mr. BELANGER. That mandatory briefing should be taking place right now.

Mr. RANDALL. You mean it has not taken place before now?

Mr. BELANGER. The oral one has already taken place. The video tape takes a little time to produce.

Mr. RANDALL. When did that briefing take place? Who listened to it, and at what places and what dates?

We want a little record to be sure that it took place.

You say some of it has taken place now?

Mr. BELANGER. It is either completed or is——

Mr. RANDALL. That is what we want to know, if it has been completed now.

You are in total agreement with this document here, and you say you are going to do these three things.

Mr. BELANGER. That is correct.

Mr. RANDALL. I think you are to be complimented. You say you have instituted a mandatory briefing. But you indicate that some of the briefings are taking place now. This is quite a period of time. The recommendation was issued 2 or 3 weeks ago. That is not too bad.

Mr. BELANGER. We went out with an immediate directive.

Mr. RANDALL. And you are doing it right now?

Mr. BELANGER. I hope it is finished.

Mr. RANDALL. All right.

Mr. BELANGER. Not the video tape, though. That takes more time.

Mr. RANDALL. I understand. I am talking about the mandatory briefing.

Have you had it at your center, Mr. Ryan?

Mr. RYAN. Not since I left last Thursday.

Mr. RANDALL. Well, the 25th of February was when the order was issued. There was not any failure of communication, was there? Everybody got the order immediately, didn't they?

Mr. RYAN. Mr. Chairman, I think the problem is the distribution of this report.

Mr. RANDALL. What is the problem? Didn't they get it to you?

Mr. RYAN. Ordinarily, normal distribution is one or two to the facility. I believe Mr. Belanger had in mind that each controller should receive a copy. That would require massive distribution subsequent to February 25, and we just haven't received our package yet.

Mr. RANDALL. You were not briefed at Cleveland when you left last Thursday. We have not found any great shortage of Xerox machines, or 3M's, or Thermofax. You could reproduce it that way, if you had to, couldn't you?

Mr. RYAN. Yes, sir.

As an interim measure, I received a 3-page copy of the safety information bulletin, I believe that is what it was called. It was issued by the National Transportation Safety Board. That was immediately copied and distributed to controllers to read. But it is not as comprehensive as this report.

In addition to the briefings conducted on this particular accident, it is a matter of standing practice in Cleveland center that, any time we have a system error, all the controllers are briefed on it—including, of course, those controllers involved.

In addition, at Cleveland center, we generated what we call a system error awareness program in which every controller at Cleveland center spent 8 hours. This was an effort to heighten the awareness of the controllers to certain problems and trends that happened within Cleveland center, and those that we know of nationally we tried to bring it to their attention and go over other system errors that have happened.

All of these were started before the November 26 accident.

Mr. RANDALL. That is encouraging.

Mr. BELANGER. At the national level, we did not wait for the NTSB report. We felt that more timely action would be appropriate, and we issued what we call a general notice to all facilities outlining certain good operating practices that they should follow, that the controllers should be briefed on and made aware of. That was issued on December 16.

Mr. RANDALL. What did you do on December 16 now?

Mr. BELANGER. We issued what we call a general notice to all facilities outlining certain good operating procedures and pitfalls that they should look for, one of which, of course, was the one brought to light by the accident.

Mr. RANDALL. May we have a copy of that, sir, please?

Mr. BELANGER. I believe your staff has a copy.

Mr. RANDALL. Let's take a look at it. I guess we will have to do that later on.

Mr. Belanger, on page 6, you said that you want to clarify a misconception of the NTSB report. They refer to the high percentage of human failures in the air traffic control system. And you said, no, that is not right. You said, we believe the high percentage refers to the high percentage of system errors that involve human factors.

Mr. BELANGER. I believe what I was disputing was that there are, indeed, a high percentage of human failures in the system as opposed to the fact that a high percentage of the system failings are indeed human failings.

I hope we are both talking about the same thing.

Mr. RANDALL. I hope we are, too.

Mr. BELANGER. Because we and the National Transportation Safety Board are talking about the same thing.

Mr. RANDALL. Aren't we all talking about the same thing?

Mr. BELANGER. What I am talking about is the fact that, of the errors or system failures that occur, a very high percentage are human failings. That is not to be construed, in my opinion, that there are a high number of human failings in the system.

That sounds like double talk, but——

Mr. RANDALL. I think we are getting pretty close to it. What is the difference between a human failure and a human factor?

Mr. BELANGER. By human failing, I am saying that, if the controller makes one error for every 42 years of experience, I would not consider that a high human error rate.

Mr. RANDALL. No, it is not very high in 40 years. But it is still a human error, and that is what we are talking about. That is why we have got Mr. Ryan here this morning.

Mr. BELANGER. So, what I am saying is, that, considering the total number of operations and control instructions, there are very few errors.

Mr. RANDALL. I just couldn't let that go by without asking.

Now, on page 7, you say you agree with the National Transportation Safety Board report, that No. 1 failed to apply the prescribed separation minima and was distracted by secondary duties.

I do not think anyone has mentioned the secondary duties. What are they?

Mr. BELANGER. I will defer to Mr. Ryan who is more familiar with the secondary duties.

Mr. RANDALL. Is this a Lear Jet you are talking about?

Mr. RYAN. Yes.

Mr. RANDALL. What happened to the Lear Jet? He placed a lot of importance on this Lear Jet.

Mr. RYAN. The Lear Jet was handed off to Cleveland center by Chicago center, but it was not on the route of flight that we had planned that it be on. And it was not on the route of flight that was indicated on its flight progress strip in Cleveland center.

At that time, Chicago center advised controller No. 1 that he had not updated the Lear Jet's route of flight.

Mr. RANDALL. Chicago center told No. 1?

Mr. RYAN. Yes.

Then controller No. 1 attempted to update the route of flight by inputting a specific message into our computer at Cleveland center. He put the message in a number of times, and each time it was rejected.

Mr. RANDALL. Who is he?

Mr. RYAN. Controller No. 1.

Mr. RANDALL. Controller No. 1 was putting it into his own center computer and the message was being rejected.

Mr. RYAN. We believe that it was being rejected because of a format error on the part of controller No. 1.

Mr. RANDALL. Then you are saying something different from what we thought you were going to say. We thought you were going to say that this Lear Jet had completely departed from his flight plan.

Mr. RYAN. Sir, we know where the aircraft is. We have a radar handle on it. We are watching it.

Mr. RANDALL. That leads to another question.

Did Chicago tell Cleveland exactly what was going on? Was there good communication?

Mr. RYAN. Controller No. 1 perfectly understood the limitations with which he was accepting the handoff on the Lear Jet. In other words, he knew he had a function to perform to update.

Mr. RANDALL. So there was no failure of communications anywhere here?

Mr. RYAN. No, sir. He understood what his responsibilities were when he took the handoff on the Lear Jet.

You must remember that we were watching the Lear Jet on radar. He was in radar contact. He had an alpha-numeric tag. We knew where he was going. We could see him. It was merely an administrative function.

Mr. RANDALL. You knew where he was going, but he wasn't going where he had said he was going.

Mr. RYAN. He was not going on the same route of flight as was previously planned.

Mr. BELANGER. Mr. Chairman, the flight was initiated out of Chicago on a route different than originally planned.

The Chicago center told the Cleveland center controller No. 1 that the route was changed and was it all right with him. Controller No. 1 said that was all right that he would take the aircraft on that route.

The next process was that controller No. 1 had to tell the computer that we were changing route. We knew it. The man knew it. Now we had to tell the computer.

Mr. RANDALL. You say you knew it. You mean Cleveland knew it?

Mr. BELANGER. Both Cleveland and Chicago.

Mr. RANDALL. Both Cleveland and Chicago knew where the Lear Jet was?

Mr. BELANGER. And where he was going. Yes.

Mr. RANDALL. Why was it that when No. 1 fed this information into his computer, it was rejected?

Mr. Ryan said a minute ago it was a format error?

Mr. RYAN. Yes

Mr. RANDALL. By whom?

Mr. RYAN. By controller No. 1.

Mr. RANDALL. Tell us what a format error is. His own computer at Cleveland rejected it?

Mr. RYAN. Yes, sir.

Mr. RANDALL. Tell us about that.

Mr. RYAN. Each instruction given to the computer must be put in in a certain sequence using the correct computer terminology. In this case, we believe that the correct terminology for the aircraft destination was not entered properly.

Mr. RANDALL How do you know that is true?

Mr. RYAN. Through the inspection of the data analysis and reduction tool.

Mr. RANDALL. Everyone has to have their own terminology.

Mr. RYAN. It is a recording of all of the information that the computer has processed throughout the 18-hour period that it is up.

Mr. RANDALL. Somewhere deep in its brain it says, this is not it?

Mr. RYAN. Yes.

Mr. BELANGER. In this instance, the aircraft was going to an airport in Canada which has a four-letter designator as its destination. We have abbreviated identifiers for the various airports, and the ones in Canada use four-letter identifiers. The controller attempted to use a three-letter identifier and the computer said, no, there is no such thing, try again.

Mr. RANDALL. No. 1 used three letters instead of four?

Mr. BELANGER. Correct.

Mr. RANDALL. Mr. Ryan, Mr. Belanger said that after the near collision, controller No. 1 was relieved from duty and began to write his reports of what had happened.

Mr. Belanger also told us No. 1 had previously scheduled annual leave over Thanksgiving, and took that time off.

When he returned, he did not work an operational sector but was detailed to a training department.

Mr. RYAN. The reason that he went to the training department was not for training or to train anyone else.

We are talking about his physical location as opposed to the actual duty.

Mr. RANDALL. That is just the way you describe it?

Mr. RYAN. Correct. We are not implying that he was being trained or was training someone else.

Mr. RANDALL. It is just where he was?

Mr. RYAN. Correct, He was preparing for the National Transportation Safety Board hearing that was scheduled for December.

Mr. RANDALL. You just had to let him be in someplace.

All right.

You say, though, Mr. Belanger, that after this hearing—and I note the word after—of the National Transportation Safety Board, he reported for duty. That is after the hearing? It was before the report, but certainly after the hearing.

Mr. RYAN. Yes.

Mr. RANDALL. And he was assigned as the D man. What does the "D" stand for?

Mr. RYAN. That is a short term for the manual controller position.

He is the controller at a sector who communicates via land lines with other sectors and terminal facilities and other centers providing a nonradar type of separation.

Mr. BELANGER. There are three levels of skills required in a control function. The lowest level skill is the manual controller function.

Mr. RANDALL. All right, we will start at the bottom. The "D" man is the manual controller.

Mr. BELANGER. Right.

Mr. RANDALL. What is the next step up the ladder?

Mr. BELANGER. The next step of skill requirement is the handoff position or tracker.

The final step is the radar control position.

Mr. RANDALL. He is the one who actually directs traffic?

Mr. BELANGER. That is correct.

The manual controller, on the other hand, is basically coordinating the activity with other facilities.

What Mr. Ryan did is put him back in at the lowest level of skill in a close supervisory posture.

Mr. RANDALL. You said he was subject to close over-the-shoulder monitoring? Who was watching No. 1 carefully?

Mr. RYAN. His supervisor. And also those peer controllers working with him.

Mr. RANDALL. Peer controllers? You mean his equals?

Mr. RYAN. Yes; his equals on the crew.

Mr. RANDALL. But he was only on manual at this point?

Mr. RYAN. Yes.

Mr. RANDALL. Somebody was satisfied that his performance was all right. According to Mr. Belanger, he was then allowed to work independently with normal supervision. That is like supervision of any other controller?

Mr. RYAN. Yes.

Mr. RANDALL. You say this occurred over a 3-week period? I think we are going to have to fit these dates together. When did he actually become a controller again?

Mr. Belanger said this close supervision, this over-the-shoulder supervision lasted 3 weeks. When did this period begin and end?

Mr. RYAN. The supervised period started on December 14 and continued through approximately January 4.

Mr. RANDALL. And that was over-the-shoulder supervision?

Mr. RYAN. Yes, sir.

Mr. RANDALL. Did radar controller No. 1 tell you on January 4 that while he was off duty he seemed to be troubled about the accident and its aftermath?

Mr. RYAN. No, sir.

Mr. RANDALL. When did he tell you about that?

Mr. RYAN. January 12.

Mr. RANDALL. What did he do between January 4 and January 12?

Mr. RYAN. He worked at his regular control duties.

Mr. RANDALL. Do you go into the en route center?

Mr. RYAN. Yes, sir. I spend time out there every day.

Mr. RANDALL. I would hope you would. You are the boss of the whole thing, aren't you? You walk around through the whole facility?

Mr. RYAN. Yes.

Mr. RANDALL. Did you observe No. 1?

Mr. RYAN. Yes.

Mr. RANDALL. From January 4 to January 12, he was performing his full duties?

Mr. RYAN. Yes, sir.

Mr. RANDALL. For 8 days.

Mr. Belanger, this is a hypothetical matter, and one on which you have testified and therefore a matter about which we are going to ask you.

In the middle of page 8, you say that there can be no hard-and-fast rule, that each controller has a different history and different level of experience.

We have been at the training center in Oklahoma City. We wrote a report. I expect you haven't read our report about air traffic controllers, have you?

Mr. BELANGER. Yes; I have.

Mr. RANDALL. We wonder sometimes if anybody ever reads them downtown.

You said that there can be no hard-and-fast rule. But what if there are two system errors in 6 months. The air traffic controller's certificate should be revoked. There may be a variety of reasons for these errors. Some are correctable by retraining, but when there are two errors in 6 months—how many chances are you going to give a controller? That is the question I am asking you.

Aren't two errors in 6 months, or one in 3 months or 4 months—or two in a half year—too much? And are you actually going to give him another chance to make the same error over again?

Mr. BELANGER. Two in 6 months would be a very serious thing. We would take a very, very hard look at a controller who had that record. You take a hard look at any controller who has a system error, and you take a particularly hard look at a repeater. There are not too many repeaters.

But the circumstance of the error can be so complicated. There could be other mitigating factors, and other contributory factors. What I am really saying is you have to look at each one on its own merit.

Mr. RANDALL. That is all right. But you say right here that even with two errors in 6 months, you still have some doubt about whether that controller's certificate should be revoked.

You say there is no fast rule, yet you just got through saying you think that two errors in 6 months is pretty serious.

Mr. BELANGER. When I say "certificate revoked" in the sense of the statement, it means fundamentally the man is going to be fired or separated.

In actuality, each controller, once he makes a system error, is fundamentally withdrawn from duty. Technically his certificate is revoked until he proves that he can again control traffic.

In this context, when we say certificate revoked, we are speaking of a final action in which the man would no longer be employed. As if it is an automatic thing.

Mr. RANDALL. In private industry, in spite of any union agreement—maybe we will get to some of the union agreements later on in these hearings—whether it is the steelworkers, the autoworkers, or wherever it is, managers actually fire people, don't they?

Mr. BELANGER. Yes, sir.

Mr. RANDALL. You have indicated that, with civil service guarantees, we have just about reached a point in the system where it is hardly possible to fire anyone if they work for the Government. Are you not saying that there is no point at which a man should be fired?

Mr. BELANGER. Mr. Chairman, we fire a great number of peoople, as a matter of fact.

Mr. RANDALL. I would like to know how many you fire. I would like that for the record.

And I would like to know how many the FAA has fired over the years. Tell us where they were, and what you fired them for.

Mr. BELANGER. It is mostly in the developmental process.

Mr. RANDALL. That is what our report was about.

I guess you would call it firing.

Mr. BELANGER. We just say, you are no longer employed.

Mr. RANDALL. That is the way it ought to be, we believe.

It certainly is true with every Member of Congress. We have to be reemployed every 2 years. We face the electorate. We either do the job or we do not do it.

I want to know those who you have fired. I want to know how many you have fired and for what.

We will get into this union agreement later on, too.

Mr. BELANGER. That is no problem. We will be happy to provide that.

[The information referred to follows:]

Question. Statistics concerning how many controllers have been fired over the years and for what causes?

Answer. Answering the question precisely as asked would tell only a very small portion of the story on how the Air Traffic System is purged of personnel incapable of controlling air traffic. In order to respond more fully, we have assembled data on all types of separations actions, e.g., removal (firings), resignations, etc. The removal category includes employees that were removed because of their inability to become full fledged air traffic control personnel. These removals occurred during the employee's developmental stage, i.e., training. Likewise, the persons listed under the resignation category were those who resigned while in a developmental stage. They elected to resign after having encountered difficulty in the training program.

Those listed under the category of transfers are employees who transferred to another agency and were lost from the FAA rolls. A substantial portion of these employees also failed the air traffic training programs. The "other" category is a combination of removals and resignation that occurred for reasons other than training failures, e.g., conduct, etc.

The significance of these statistics is the revelation that the air traffic control system is purged of personnel incapable of controlling air traffic prior to them acquiring full performance level status. This assures the integrity of the system and maintains the high level of safety evident in the few errors committed by control personnel.

	Terminals	Centers	Combined
Calendar year 1968:			
A. Removals	6	21	
B. Resignations	27	123	
C. Transfers	6	18	
D. All others	29	35	
Total separations	68	197	
Calendar year 1969:			
A. Removals	22	53	
B. Resignations	105	564	
C. Transfers	4	7	
D. All others	76	87	
Total separations	207	711	
Calendar year 1970:			
A. Removals	54	71	
B. Resignations	282	720	
C. Transfers	9	51	
D. All others	85	97	
Total separations	430	939	
Calendar year 1971:			
A. Removals	21	68	
B. Resignations	125	292	
C. Transfers	12	53	
D. All others	81	45	
Total separations	239	458	

	Terminals	Centers	Combined
Calendar year 1972:			
A. Removals	22	102	
B. Resignations	80	233	
C. Transfers	9	40	
D. All others	116	65	
Total separations	227	440	
Calendar year 1973:			
A. Removals	10	22	
B. Resignations	96	109	
C. Transfers	4	21	
D. All others	18	41	
Total separations	128	193	
Calendar year 1974:			
A. Removals	14	14	
B. Resignations	71	111	
C. Transfers	7	14	
D. All others	41	21	
Total separations	133	160	
Calendar years 1968–74:			
A. Removals	149	351	500
B. Resignations	786	2,152	2,938
C. Transfers	51	204	255
D. All others	446	391	837
Grand total	1,432	3,098	4,530

Mr. RANDALL. I would like to see the whole thing and see what part they might have had in this.

I was startled—that is the only way I can put it—at your testimony on page 9. You start out by almost washing your hands of this whole November 26, 1975, accident, whether or not the boss down there is the regional director. You say it is the facility supervisor's judgment that we must rely most upon in deciding what is the appropriate action to take.

This is tantamount to saying there that you never review the case yourself. You are going to completely and totally rely on the facility supervisor. But on page 9 you also say that disciplinary action is not taken in every case. That is understandable.

But do you even consider disciplinary action in every case? Who considers it? There are all kinds of disciplinary action. A letter of reprimand can be issued. I think some controllers should be fired. There is no question about it, and I think there are many people in this country who feel the same way.

However, you tell us in your statement that you rely totally on the facility supervisor's judgment, and then you go on in your statement to say: However, an employee who deviates from prescribed standards and procedures through negligence or carelessness can expect appropriate disciplinary action.

This is how you try to qualify what you have just said.

Now we are talking about a deadly serious accident. I want to be sure that I understand you. Are you going to rely upon a facility supervisor's judgment in deciding what action should be taken? Are you going to let it stop there?

Who is the supervisor? Mr. Ryan? Are you going to rely on his judgment? We are going to ask him about his judgment in putting this man back to work later on.

Are you going to rely on Mr. Wubbolding? Are you going to rely on Mr. Cyroki? Whom are you going to rely on?

Where do you stop? You tell us that you are going to leave it all up to the facility supervisor's judgment. You are going to stop there. Isn't there some review?

Now this is my question. Who finally decided it was up to Mr. Ryan solely and totally and completely to determine whether this man should go back to work? Did anybody monitor—if you want to use that word—Mr. Ryan's judgment?

Mr. WUBBOLDING. I was kept apprised all the way along of the actions that were being taken, and I concurred with the actions of Mr. Ryan.

Mr. RANDALL. You approved everything Mr. Ryan did?

Mr. WUBBOLDING. Yes, I relied on his judgment and the supervisor's judgment with respect to the capabilities of the individual.

Mr. RANDALL. You relied on his judgment. Did you make an investigation of your own, sir?

Mr. WUBBOLDING. Yes, sir.

We had an individual who went over there.

Mr. RANDALL. Who was the individual?

Mr. WUBBOLDING. Daniel Schillaci.

Mr. RANDALL. I would like to have his report. Maybe we can hear from him, too.

Mr. Daniel Schillaci went over there? Went over where?

Mr. WUBBOLDING. He went over to Cleveland center from the Chicago office. He is from my evaluation staff.

He was not involved in all of these various decisions.

Mr. RANDALL. Where is his report?

Mr. WUBBOLDING. He assisted the facility in preparation of the material that we needed for the NTSB hearing.

Mr. RANDALL. Did he write a report?

Mr. WUBBOLDING. No report.

Mr. RANDALL. We do not know what he said? He just went over there?

Mr. RYAN. He was a witness at the NTSB hearing on December 12.

Mr. RANDALL. We hear a call of the House.

We are going to have to adjourn at this point until the call of the Chair to pursue this matter, which will probably not be possible in the remainder of this week because of other duties.

The subcommittee will adjourn, to reconvene subject to the call of the Chair, and you will all be notified. We will have you back.

[Whereupon, at 12 noon, the subcommittee adjourned, to reconvene subject to the call of the Chair.]

FAA RESPONSE TO AIR TRAFFIC CONTROL SYSTEM DEFICIENCIES

TUESDAY, MARCH 16, 1976

HOUSE OF REPRESENTATIVES,
GOVERNMENT ACTIVITIES AND
TRANSPORTATION SUBCOMMITTEE
OF THE COMMITTEE ON GOVERNMENT OPERATIONS,
Washington, D.C.

The subcommittee met, pursuant to call, at 10:15 a.m., in room 2247, Rayburn House Office Building, Hon. Wm. J. Randall (chairman of the subcommittee) presiding.

Present: Representatives Wm. J. Randall and Willis D. Gradison.

Also present: Miles Q. Romney, counsel; Bruce Butterworth, research assistant; Marjorie A. Eagle, clerk; and Richard M. Tempero, minority professional staff, Committee on Government Operations.

Mr. RANDALL. The Subcommittee on Government Activities and Transportation will convene.

I want to express my gratitude for the presence of the gentleman from Ohio for his presence to constitute a quorum as we commence this morning.

Last Tuesday, we had some of the gentlemen from the Federal Aviation Administration with us to discuss FAA's response to an air traffic control system error involving human factors.

Our hearing was occasioned by certain actions of the FAA taken with regard to certain radar control operators involved in the November 26, 1975, near midair collision over Carleton, Mich.

Because of the call of the House, we did not have a chance last week to finish our questioning. Therefore, we have asked the FAA witnesses to reappear today so that we may continue.

Gentlemen, we welcome you back. We will proceed immediately with our questions.

We have with us again, Mr. Raymond G. Belanger, Director of the Air Traffic Service, Federal Aviation Administration. He is accompanied by Mr. John F. Wubbolding, chief, Air Traffic Division, Great Lakes Region, FAA, and Mr. John Ryan, chief of the Cleveland Air Route Traffic Control Center of the FAA.

Mr. Belanger, please. Would you join us for a moment?

We will go off the record for a moment.

[Discussion off the record.]

Mr. RANDALL. Back on the record.

Mr. Ryan, last Tuesday Mr. Belanger placed considerable emphasis on the role which the Facility Review Board plays in determining the nature and degree of controllers' involvement in air traffic control system errors.

It is the understanding of the subcommittee, and I want you to be sure you understand what we are talking about, that in the matter of November 25, 1975, you never convened a review board to evaluate this system error.

Our question to you at this time is, why? Why did you not convene such a board?

STATEMENT OF RAYMOND G. BELANGER, DIRECTOR, AIR TRAFFIC SERVICE, FEDERAL AVIATION ADMINISTRATION, DEPARTMENT OF TRANSPORTATION; ACCOMPANIED BY JOHN F. WUBBOLDING, CHIEF, AIR TRAFFIC DIVISION, GREAT LAKES REGION; AND JOHN RYAN, CHIEF, CLEVELAND AIR ROUTE TRAFFIC CONTROL CENTER

Mr. RYAN. Sir, the circumstances surrounding the November 26 accident were unique for me. We made the decision not to convene the System Error Review Board because the National Transportation Safety Board was conducting an investigation and we did not want any results that may have been contrary. Not that they would have been, but it was their determination to make, we felt, and we let them make it.

Mr. RANDALL. Mr. Ryan, you partially answered the question when you said it was unique.

Do you mean this was a unique system error or a unique accident?

Mr. RYAN. Yes, sir.

To have an accident and what might have been initially determined to be a system error at the same time is unique.

Mr. RANDALL. You have not made that very clear to us, sir. The fact that it was unique should have been all the more reason to have convened the Review Board, should it not?

Mr. RYAN. We did not feel we should prejudge what the National Transportation Safety Board's determination should be.

Mr. RANDALL. Later on, did you not prejudge what their decision—or someone else's decision—was going to be when you put this controller back to work?

Mr. RYAN. No, sir.

Mr. RANDALL. You must have had some season. We will get around to that later.

But who—when you say "we"—made the decision not to convene this Review Board?

Mr. RYAN. Myself and the people in the Great Lakes region.

Mr. RANDALL. Who are those people?

Mr. RYAN. The operations branch chief.

Mr. RANDALL. Specifically who?

Mr. RYAN. Joseph Bosslett.

Mr. RANDALL. Who is he? By "we," do you mean "I," yourself—Mr. Ryan—and Mr. Bosslett? What is Mr. Bosslett's capacity, and who is he? Is he with us today?

Mr. RYAN. No, sir.

I would like to initially say, sir, that the decision not to have a System Error Review Board was mine, and that this decision was conveyed to Mr. Bosslett who, in this particular incident, is Mr. Wubbolding's agent.

Mr. RANDALL. What do you mean by "agent"?

Mr. RYAN. When air traffic control centers, air traffic control towers, flight service stations, generally deal directly with the operations branch in the regional office.

Mr. BELANGER. Mr. Chairman, if I might——

Mr. RANDALL. Mr. Belanger, let the gentleman testify, if you will, please. You can help him later on.

We are going ahead with Mr. Ryan, now, please.

Mr. Ryan, you conveyed the decision to Mr. Bosslett, who you say was Mr. Wubbolding's agent?

Mr. RYAN. Yes, sir.

Mr. RANDALL. Is Mr. Bosslett a subordinate of Mr. Wubbolding?

Mr. RYAN. Yes, he is.

In other words, the operations branch is the contact within the region for the air traffic control centers, towers, and flight service stations.

I do not deal on a day-to-day basis directly with Mr. Wubbolding.

Mr. RANDALL. But you could have, in a matter of this importance?

Mr. RYAN. I could have.

Mr. RANDALL. Is there some barrier or some impediment so that you could not talk to him?

Mr. RYAN. No.

Mr. RANDALL. You put the matter on Mr. Bosslett's lap and said, "Here it is." And Mr. Bosslett said, "We are not going to do anything on the Review Board."

Is that correct? Or are you going to take full responsibility?

Mr. RYAN. We have decided, once it was declared an accident, and that in fact the NTSB was going to conduct an investigation, we considered whether or not it would be proper for the FAA, or Cleveland center in particular, to conduct a System Error Review Board, which may have in fact prejudged what the NTSB, which was making a full investigation of the accident, would determine.

Mr. RANDALL. Now, Mr. Ryan, you were not precluded by regulations from having this Review Board. You were just afraid there would be a leak of some kind, that you could not control your own investigators?

Was that your reasoning?

Mr. RYAN. No.

Mr. RANDALL. You say that once it was declared an accident, "We had decided * * * a review board * * * would prejudge"?

Mr. RYAN. Let us say it would be improper.

Mr. RANDALL. Which is it—prejudge or improper?

Mr. RYAN. Both.

Mr. RANDALL. I see.

I want to ask you to expand on both of those terms.

You cannot prejudge an NTSB investigation. There is no way you could have prejudged it. They are going to make their own decision.

What I am going to try to show during these questions is that you did not do anything. You did not do anything except put the man back to work.

Is that not correct?

In your own mind, you just made the decision ex parte.

Isn't that about it?

Mr. RYAN. The decision was made to put him back to work. Yes, sir.

Mr. RANDALL. But you did not make an inquiry as to whatever happened. There was no record made. Maybe you talked to him. I don't know. We will get around to that later on.

You just simply put him back to work.

You say "prejudge" and "improper" or "inappropriate." What was that other word?

Mr. RYAN. I said "improper," but "inappropriate" is a better word.

Mr. RANDALL. Thank you.

Mr. Ryan, the next question I will ask you is whether you are familiar with the regulations of the FAA which require that you convene a review board, at some point.

Have you ever yet convened a review board up?

Mr. RYAN. Not on this accident. No.

Mr. RANDALL. Don't the regulations require that you do that?

Mr. RYAN. No.

Mr. RANDALL. On what interpretation do you place that?

Mr. RYAN. Excuse me, sir, a moment.

Mr. RANDALL. Sure.

Mr. BELANGER. May I interject a comment?

Mr. RANDALL. You are going to be given full opportunity, Mr. Belanger. Just bear with us a little while.

Maybe Mr. Wubbolding also would like to talk. But we will get around to him, too.

Mr. Belanger, since you want to contribute, I am going to ask you a question.

You testified last week that there was procedure requirement to establish a review board, which, at least according to the intent of your regulations down there—and whether you follow the intent of Congress or not is another matter—but according to the intent of your regulations, there should be an in-depth, full-scale investigation of an incident.

Whether this was an incident or an accident, or not—you testified last week that the Review Board is required to make their report within 15 working days of the occurrence.

Now your only loophole here is, that somebody made a decison that there was not going to be a review board.

Why was that decision made?

Mr. Belanger, if you didn't have anything to do with this decision, you cannot answer my question. You told me a minute ago you didn't have anything to do with this decision. But you wanted to contribute, so we are giving you a chance to do so.

Mr. BELANGER. This gets a little murky at this point. As soon as the NTSB declared the incident to be an accident, their investigation preempts any investigation on the part of the FAA.

The NTSB statute says that once an occurrence is declared an accident, the NTSB will conduct the investigation unless they specifically ask us to conduct an accident investigation.

Mr. RANDALL. That is the point.

According to our counsel, and check me if I am in error, you have the latitude and probably the responsibility under regulations, to proceed with your own review board.

You are not going to tell the NTSB that they are wrong. But you still have the authority, and according to the regulations, the right, to convene a review board, regardless of whether as Mr. Ryan says, it would prejudice an NTSB investigation. It certainly wouldn't prejudice if it wasn't released. It would not have been improper to conduct some kind of a review board here.

There is no prohibition against review boards. Is there anything in the regulations that says you may not go ahead with a review board? I would like you to point it out to me, if you can find where it is.

Mr. BELANGER. Title 7 of the Federal Aviation Act, section 701, part (f) refers to the use of the agency—that is, the Federal Aviation Administration Agency—" * * * acts in investigations," it says, "upon the request of the Board. The Secretary of Transportation is then authorized——"

Mr. RANDALL. Which board, sir?

Mr. BELANGER. The National Transportation Safety Board is authorized to make investigations with regard to aircraft accidents and report to the Board the facts, conditions, circumstances, thereof, and the Board is authorized to utilize these reports in making its determinations of probable cause under this title.

The interpretation of this section is that only on request of the Board is the FAA authorized to conduct an accident investigation. Therefore, to convene a review board would constitute an investigation of the accident with probable cause and findings, which, in our interpretation, could be contrary to the act inasmuch as the Board has not authorized us to conduct such an investigation.

We work side-by-side with the Board when they conduct their investigation.

Mr. RANDALL. We understand that, Mr. Belanger.

The Chair has had a few other responsibilities since last Tuseday, but we have kept this very much in mind.

We are talking about two different things here.

The section you referred to is concerned with the probable cause of what happened.

We are talking about something else. We are talking about the negligence and the carelessness of the controller.

There is nothing to preclude you from reviewing that aspect of an accident.

Mr. RYAN. Sir, in 30 other cases since May of 1974, we have conducted System Error Review Boards.

Mr. RANDALL. Yes, and the National Transportation Safety Board tells us you routinely conduct parallel investigations.

Mr. RYAN. Right. And System Error Review Board——

Mr. RANDALL. Did you say "right"?

Was I right or wrong?

Mr. RYAN. Would you repeat what you said?

Mr. RANDALL. That the National Transportation Safety Board and the Review Board of FAA conduct parallel investigations many, many times.

Mr. RYAN. I don't know that personally to be true.

Mr. RANDALL. I thought you said "right."

Mr. RYAN. I do not know that to be personally true.

Mr. RANDALL. You don't know it?

Mr. RYAN. No.

Mr. RANDALL. Well, you do not know it to be untrue, then?

Mr. RYAN. That is correct.

Mr. RANDALL. You just don't know.

Mr. RYAN. From my personal experience, I do not know that to be true.

Mr. BELANGER. Mr. Chairman, we do not routinely conduct a parallel accident investigation with the Board. We will participate with the Board in their investigation.

Mr. RANDALL. Then, as far as the November 26 accident is concerned, and this is an important point—before you put radar controller No. 1 back to work, the FAA had not conducted a review of any kind. Isn't that right?

Mr. RYAN. The FAA did not have a System Error Review Board.

Mr. RANDALL. Just you and Mr. Bosslett made the decision?

Mr. RYAN. I certainly reviewed the facts.

Mr. RANDALL. And after that you made the decision. It did not go to a review board of any kind?

Mr. RYAN. No, sir.

Mr. RANDALL. You put the man back to work how long before the National Transportation Safety Board ever came in?

Mr. RYAN. He was put back to work following the National Transportation Safety Board hearing on December 12.

Mr. RANDALL. I am not talking about the hearing. I am talking about the report.

Mr. RYAN. The report was issued at 6:30, February 25.

Mr. RANDALL. That is right.

No. 1 had gone back to work for how long? About 30 days from December 15?

Mr. RYAN. Approximately December 14. Not approximately—exactly December 14 until January 19.

Mr. RANDALL. That is the point I am trying to establish. I think we have that nailed down.

And there was no review board of any kind in your shop. Just you and Mr. Bosslett?

Mr. RYAN. There was no System Error Review Board.

I would like to make a point, sir, that System Error Review Boards do not recommend disciplinary action in any case.

Mr. RANDALL. The next question, then is, What do they exist for? They try to find the facts, don't they?

Mr. RYAN. They try to determine probable cause so that system errors can be prevented.

Mr. RANDALL. They are charged with other responsibilities than the determination of probable cause. Check your regulations on that. If that is not so, then there is a glaring omission here in both law and the regulations.

Probable cause is a factor. Probable cause is one subject of an investigation. But sooner or later you must determine whether or not there was negligence—or what degree of negligence and failure, omissions, carelessness, whatever you want to call it—there was.

When you put the gentleman back to work on December 15, there had been no conclusions of any carelessness or anything else.

Isn't that true?

Mr. RYAN. On December 14.

Mr. RANDALL. Well, all right.

Right or wrong?

Mr. RYAN. I put him back to work on December 14.

Yes, sir.

Mr. RANDALL. I am asking you—I think we have it already on the record—there had been no review board? It was simply your decision, and Mr. Bosslett's decision?

Mr. RYAN. That is correct.

After I attended the NTSB hearing, where all of the facts were revealed.

Mr. RANDALL. Mr. Ryan, I am trying to nail down the fact that the National Transportation Safety Board had not reached any conclusion when you attended those hearings

Mr. RYAN. That is correct, sir.

Mr. RANDALL. Thank you.

Mr. WUBBOLDING. May I——

Mr. RANDALL. Just a minute, Mr. Wubbolding. We will get around to you.

We are trying to pick up one grain of sand at a time.

Mr. RYAN. Mr. Chairman?

Mr. RANDALL. I have a question for you, Mr. Ryan.

Was it possible you made the decision in your own mind and heart and being that you were not going to convene this review board because somebody somewhere along the line had said that this is no longer an incident but an accident.

Was that your reasoning?

Mr. RYAN. That is partially true.

Mr. RANDALL. If that is your reasoning, isn't the fact that it was an accident all the more reason for you to have convened a review board? It is a much more serious matter than an incident.

Isn't that right?

Mr. RYAN. Yes, sir.

It was much more serious.

Mr. RANDALL. Perhaps I can get at the truth of this thing another way around.

Is every system error, whether you do not want to call it an accident or an incident, investigated by the National Transportation Safety Board?

Mr. RYAN. No, sir.

Mr. RANDALL. We are going to try very hard to find out how many system errors are never reported somewhere along the line—how many we never hear about. There are many, we believe personally. I was personally involved in one about a year ago. But there was never any record made of that incident.

Mr. RYAN. May I make two points?

Mr. RANDALL. Go ahead.

Mr. RYAN. No. 1, with regard to the Review Board and the National Transportation Safety Board, it would seem important that it be investigated, and, if in fact it was, it was a dual investigation. Is a dual investigation necessary if one can accomplish the same thing?

The second point is that, in section 7210.3(c), paragraph 426——

Mr. RANDALL. Will you go a little slower—section 7210.3(c) of what?

Mr. RYAN. That is our Facility Management Handbook.

Mr. RANDALL. Are these regulations promulgated at FAA headquarters?

Mr. RYAN. Yes, sir. FAA.

Mr. RANDALL. Section 7210, (c) subsection 3?

Mr. RYAN. The book is section 7210.3(c). And it is paragraph 426.

Mr. RANDALL. Yes, I am with you.

Mr. RYAN. It says:

> Return to Operational Duty. After preliminary investigation, employees found not responsible for contributing to the error will be returned to operational duty without any urther action.
>
> If subsequent in-depth investigation reveals these employees or others to be responsible for or contributing to the error, the employee shall be removed from operational duty in the action specified in 427, and, if appropriate, 431 shall be taken.
>
> After satisfactory completion of the prerequisite in 427, and the appropriate supervisory personnel are satisfied that weaknesses have been corrected, return the specialist to operational duty unless the specific case requires other action.

Now I feel that——

Mr. RANDALL Will you just hold up there for a minute, until we get a chance to go back and read that.

Section 426 that you have referred us to states, and this is the regulation I am reading verbatim:

> After preliminary investigation, employees found not responsible for contributing to the error will be returned to operational duty without any further action.

This was November 26, 1975, wasn't it?

Mr. RYAN. Yes, sir.

Mr. RANDALL. The preliminary investigation had to be yours. You said that it was yours and Mr. Bosslett's. Or else you referred it to Mr. Bosslett.

Have you heard from Mr. Bosslett any more?

Mr. RYAN. It was my investigation.

Mr. RANDALL. Yes.

Evidently you found, or must have found—I do not want to put any words in your mouth; I am not trying to tell you what to testify to—but the facts are that, after your preliminary investigation, you returned radar controller No. 1 to duty; did you not?

Mr. RYAN. After my preliminary investigation, I returned controller No. 2 to duty.

Mr. RANDALL. Did you not also return controller No. 1 to duty.

Mr. RYAN. On December 14, which is however many days—I guess it would be 19 days—from November 26—prior to that, controller No. 1 had not been returned to duty.

Mr. RANDALL. We are just talking about time. You did return him to duty, whether you did it the next day or December 14—you did return him to duty?

Mr. RYAN. Yes, sir, after applying the criteria in 427.

Mr. RANDALL. We will have to get down to paragraph 427; however, we are still on paragraph 426, however. I must ask you a few questions on 426. We believe there are several things that have not been done.

We are still on paragraph 426. The controller is returned to operational duty without any further action. Are you trying to say to us that the other action is taken under paragraph 427?

Mr. RYAN. No. It says:

If subsequent in-depth investigation reveals these employees or others to be responsible for or contributing to the error, the employee shall be removed from operational duty in the action specified in 427, and, if appropriate, 431 shall be taken.

It indicates that controller No. 2——

Mr. RANDALL. All right. Let us try to be clear on the timing here.

Right here we are talking about the preliminary investigation. When did you make that preliminary investigation? When did it begin and when did it end?

Mr. RYAN. It was a continuing investigation. It began on November 26, at 8:45, for me.

Mr. RANDALL. When did you end it?

Mr. RYAN. In the case of controller No. 2——

Mr. RANDALL. We are talking about controller No. 1, if you please.

Mr. RYAN. In this case, Mr. Chairman, I cannot separate the two because the investigation must reveal certain things, and certain actions were taken after certain stages of the investigation.

Mr. RANDALL. Now, Mr. Ryan, if we may interject this: From all the information that we have read, No. 2 was somewhat of a hero. No. 2 was the man who saved the lives of these people, wasn't he? He was someone to be given the laurel, salute, and accolade.

No. 1 was the one who nearly cost the lives of these passengers.

Isn't that the conclusion which was already reached by the National Transportation Safety Board?

Mr. RYAN. No.

Mr. RANDALL. No? You are shaking your head.

Is that not the conclusion they reached?

Mr. RYAN. No—I guess what I am saying is that you are paraphrasing what the report says, and I am not sure that you are paraphrasing exactly what the report said.

Mr. RANDALL. Oh. You are now saying that the report did not say that?

Mr. RYAN. No, sir. I am not saying it.

Mr. RANDALL. You are asking us now about No. 2, but I want to ask you about No. 1, because that is the man you put back to work. That is where the negligence and the carelessness was involved.

This is the conclusion. On the last page—just before it was signed.

The National Transportation Safety Board determines that the probable cause of this near collision was the failure of the radar controller—

They do not call him by name; they don't call him radar controller No. 1—

To apply prescribed separation criteria when he first became aware of a potential traffic conflict, which necessitated an abrupt collision avoidance maneuver. He also allowed secondary duties to interfere with the timely detection of the impending traffic conflict when it was displayed clearly on his radarscope. Contributing to the accident was an incomplete sector briefing during the change of controller personnel—about one minute before the accident.

The Chairman of the NTSB told the chairman of this subcommittee that what happened was that the man simply got up and

went to dinner or someplace—wherever he went—and that he never said anything to the man who relieved him about the situation.

Did you dig into that?

Mr. RYAN. That is not exactly the way it happened.

Mr. RANDALL. No?

Mr. RYAN. No, sir.

Mr. RANDALL. But you have never convened a review board of any kind. You do not have anything in writing, any report like this, do you?

Mr. RYAN. Sir, I can make a preliminary investigation without having a review board.

Mr. RANDALL. We understand that, but did you ever reduce it to writing?

You say you gave something to Mr. Bosslett. You didn't call him on the telephone, did you?

Mr. RYAN. Yes. I called him on the telephone.

Mr. RANDALL. But you never reduced anything to writing?

Mr. RYAN. No, sir.

Mr. RANDALL. Not up to this time?

Mr. RYAN. Not with regard to why or why not a System Error Review Board was conducted.

Mr. RANDALL. Doesn't it occur to you that this is a matter of such transcending importance involving the lives of 306 people and that there should have been some conclusion in writing by yourself?

Mr. RYAN. What I am saying is, I do not have a piece of paper that testifies to the fact that Mr. Bosslett and myself agreed—like a memo for the record—on such and such a date that we would not conduct a System Error Review Board.

However, I cannot say categorically that someone on my staff did not have discussions with the evaluations branch in the region, and may have, in fact, made a memo for the record stating that very fact.

Mr. RANDALL. But you are the boss, are you not? You are the man?

Mr. RYAN. Yes, sir.

Mr. RANDALL. You are the one making the decision?

Mr. RYAN. Yes, sir.

Mr. RANDALL. My staff just called my attention to the fact that you say this conclusion of the National Transportation Safety Board is not correct.

You say you do not agree with this finding—the one I read into the record. We will have it read back, if you like. Or I will read it again.

You said that is not right—that it is not true.

Mr. RYAN. Excuse me, sir——

Mr. RANDALL. Will the reporter read back what the gentleman said. He said this wasn't the whole story, or this was not exactly like it was. What was his answer after I finished reading it?

[The portion from page 21, line 19, through page 22, line 16, was read.]

Mr. RANDALL. The review by our reporter indicates that the Chair had finished reading the NTSB's determination of probable cause and then related portions of a telephone call he had received from the NTSB Chairman about the time this accident occurred. Maybe it was supplemental, maybe we are going to have the National Transportation Safety Board in here and interrogate them.

The Chair simply stated that, whether or not it is included in the NTSB report, and no matter how you word it—whether it was an incomplete sector briefing or something else—No. 1 got up and left and went to lunch or to dinner, as the case may be, and did not say anything to No. 2 who relieved him.

You can comment on that as you please.

Mr. RYAN. Yes, sir.

No. 1 was relieved by No. 2, who received a briefing.

Mr. RANDALL. You are disagreeing with the——

Mr. RYAN. I am not getting into any great detail about the details of the briefing. What I am disagreeing with is that No. 1 got up and went to unch. Because No. 1 remained.

Mr. RANDALL. That is an established fact, isn't it?

Mr. RYAN. No. No. 1 was there when it happened.

When the accident happened, he was not——

Mr. RANDALL. Well, just a minute—then he must have come back.

Mr. RYAN. He was not plugged in. In other words, he had unplugged from the sector—pulled his headset out. He was standing there talking to No. 2. He remained there with No. 2, not operating the position, but in that area.

Mr. RANDALL. Mr. Ryan, did he or did he not go to lunch?

Mr. RYAN. I think the words are that he was relieved for a lunch break. It did not say where he went.

Mr. RANDALL. But he did not leave?

Mr. RYAN. No, sir.

Mr. RANDALL. In other words, you are saying the facts are that No. 1 never left at all?

Mr. RYAN. That is correct. He was relieved from his position and he was not working the radar position any longer.

Mr. RANDALL. Was he looking at the radar scope? You should be knowledgeable of this. You say you conducted your own investigation. Was he looking at the radarscope while all this was going on?

Mr. RYAN. He said he was having a conversation with the manual controller, who was the man sitting right next to the radar controller.

Mr. RANDALL. In other words, this thing is even worse than it seemed because No. 1 was standing there. He didn't leave at all? No. 1 didn't leave at all?

Mr. RYAN. Not that I know of.

Mr. RANDALL. Well, you said you conducted a pretty good investigation. Do you know whether he left or not?

Mr. RYAN. He did not leave.

He was relieved; he did not leave.

Mr. RANDALL. He didn't go.

But he was relieved to go to lunch?

Mr. RYAN. That is correct, sir.

Mr. RANDALL. But he didn't leave?

Mr. RYAN. That is correct.

Mr. RANDALL. That is what you are saying?

Mr. RYAN. Yes, sir.

Mr. RANDALL. Did you read the depositions taken by the National Transportation Safety Board? [1]

[1] Transcript of deposition proceeding: "National Transportation Safety Board. In the matter of: The investigation involving AA182 approximately 27 miles west of Carleton, Mich., VORTAC, on November 26, 1975, at approximately 0023 Gmt. Docket No. 1–0024. Cleveland, Ohio, December 12, 1975." A copy is in the subcommittee files.

Mr. RYAN. No, sir.

Mr. RANDALL. You have not read them?

Mr. RYAN. No sir, but I was there.

I was at the hearing.

Mr. RANDALL. I understand that, but have you had a chance to review them since then? Have you read them over since then?

Mr. RYAN. No, sir. I never received any copies

Mr. RANDALL. You mean the FAA has not received any copies of this?

Mr. RYAN. No, sir. I did not receive any copies.

Mr. RANDALL. Don't you think it was important to receive a copy? Aren't you going to be questioned somewhere down the line?

We are going to have a hypothetical case for you in a minute or two.

If there had been a collision, instead of a near-collision, you certainly would have had an opportunity to read them; wouldn't you, sir?

Mr. RYAN. Yes, sir. If I had received one, I wou'd be glad to read it.

Possibly because I did not testify, I did not receive a deposition, or copies of them.

Mr. RANDALL. We will come back to some of these things in a minute.

Now I am going to give you the hypothetical case I was talking about. You will, of necessity, have to follow us rather closely. We will repeat it, if need be.

Let us alter the sequence of November 26 a little.

Assume that the two aircraft are flying completely in the clouds. Assume that radar controller No. 2 only notices the near midair collision after it had occurred. In other words they came perilously close to a horrible catastrophe.

Here are these two planes passing in the clouds and at night. This is a hypothetical case.

Assume that radar controller No. 2 came on duty and had just seen this near collision of perhaps 500 feet, after it had occurred. He just shook his head and said, "My God, we could have killed all these people."

Then, assume that, just out of luck or Providence, when the two aircraft passed perilously close to each other within a few hundred feet of each other, they were not even aware of it; they went on to their destinations. The record shows that the TWA L–1011 went on to Los Angeles. They didn't know how close they had come to all being killed until they had landed in Los Angeles.

Here are two planes closing at speed of over 1,000 miles per hour and, whether they pass within 20 feet or 50 feet or 500 feet of each other, the fact of the matter is that that is a system error. Is that correct?

Mr. RYAN. Yes, sir.

Mr. RANDALL. You heard the hypothesis. You say that is a system error?

Mr. RYAN. Yes, sir.

Mr. RANDALL. At this point, are you prepared to say whether or not that would constitute a human error?

Mr. RYAN. It would appear, from the facts as you have related it, that you said that the two airplanes passed within 200 feet——

Mr. RANDALL. Or 500 feet.

Mr. RYAN [continuing]. And they were IFR and the pilots did not see each other. I don't believe you stated a reason why they passed. Was there a radar failure?

Mr. RANDALL. It is up to you to say what kind of a failure it was. This is a hypothetical case.

Mr. RYAN. Okay, sir. Then, with the facts you have given me, I cannot make a determination whether it was a human failure, equipment failure, or a procedural failure.

Mr. RANDALL. Well then, let us assume it is a human error.

Mr. RYAN. Okay. The assumption is than that it is a human failure.

Mr. RANDALL. We are on the top of the case now.

What actions would you take in response to this type of system error?

Mr. RYAN. Do you mean insofar as a System Error Review Board?

Mr. RANDALL. Yes. What would you do? You are the boss out there. Assume this incident happened in Cleveland center airspace.

Mr. RYAN. I would certainly have a System Error Review Board, because it would appear, from the information that you have given me, that it was not an accident, and consequently the National Transportation Safety Board would not investigate it, and I would have a System Error Review Board as I would in any other system error.

Mr. RANDALL. But you did not have one in this accident, did you?

Mr. RYAN. That is right, because NTSB was investigating.

Mr. RANDALL. Because you were afraid it was going to upset the National Transportation Safety Board in some way.

Mr. RYAN. The NTSB was investigating it. Yes, sir.

Mr. RANDALL. At this point, Mr. Ryan, you say you have never received a copy of their deposition?

Mr. RYAN. No, sir.

Mr. RANDALL. Don't you feel you are entitled to one?

Mr. RYAN. I would like to have one.

Mr. RANDALL. Couldn't you get Mr. Belanger or Mr. Wubbolding to give you one?

Mr. Wubbolding, will you take the responsibility to see that he gets one?

Mr. WUBBOLDING. Yes, sir.

Mr. RANDALL. Ordinarily, shouldn't he have one?

Mr. WUBBOLDING. No, we do not normally get them. I have not seen them myself, either.

Mr. RANDALL. You are chief of the entire Great Lakes region are you not?

Mr. WUBBOLDING. Yes, sir. We got a copy of the National Transportation Safety Board——

Mr. RANDALL. You are the chief of the Great Lakes region?

I believe it was William James—a psychologist of pretty good reputation—who said, the only good definition of intelligence is the ability to benefit from experience.

Don't you think you might be able to benefit by some of this experience if you disseminate this report a little bit?

Mr. WUBBOLDING. Yes, sir. We have disseminated the report. However, we have not——

Mr. RANDALL. Did you get an original copy?

Mr. WUBBOLDING. Yes, sir. We have got an original copy of the report. Are you speaking of the specific deposition?

Mr. RANDALL. I am speaking of the report of the deposition. A report which would draw some lessons from this accident. We want to try to learn a little bit from our experience, that is all. It is very simple: We want to see that this does not happen again.

Mr. RYAN. Mr. Chairman, we have a copy of the report.

Mr. RANDALL. That is what I asked you. You do have it, then?

Mr. RYAN. I am sorry. You asked if we had a copy of the depositions, which is this transcript.

Mr. RANDALL. The transcript, yes.

Mr. RYAN. This is the transcript. And this is the report.

Mr. RANDALL. You say you have a copy of a report, but not a copy of the transcript of the deposition?

Mr. RYAN. That is correct.

Mr. RANDALL. Mr. Wubbolding, do you have a copy?

Mr. WUBBOLDING. No, sir.

Mr. RANDALL. You have never received one?

Mr. BELANGER. There is only one copy in the agency, as far as I can determine.

We went up to the NTSB of the Washington headquarters and obtained it, and that is the only copy that I am aware of. It happens to be right here. Mr. Ryan has it in his hand.

Mr. RANDALL. We have been fortunate to get one. We are going to make good use of it before we are through with this matter.

Perhaps it is not a very interesting and romantic matter, but we are going to dig into it and find out what happened and who is to blame for it.

There has got to be somebody somewhere along the line of FAA who is derelict other than radar controller No. 1.

Mr. RYAN. Yes, sir, may I read something from the NTSB in the matter of American 182, November 26?

Mr. RANDALL. Is this in your deposition?

Mr. RYAN. Yes, sir.

Mr. RANDALL. What page are you reading from?

Mr. RYAN. Page 28.

Mr. RANDALL. Thank you, sir.

Mr. RYAN. It is line 15. They are querying controller No. 1, the NTSB, and they said:

> Did you leave the immediate vicinity of the Wayne sector after you were relieved?
> Answer. No, sir.
> *Question.* Is there any particular reason why you did not leave the immediate area?
> Answer. No.
> *Question.* Well, how did you occupy yourself immediately after you were relieved and before you left the area?
> Answer. I spoke to the Detroit radar man.
> *Question.* Well, did your conversation with the Detroit radar man concern any matter of a control nature or was it just a personal conversation?

I could go on, but I think the point I am trying to make is that the man did not leave the sector after having been relieved.

On page 30, line 14:

Question. I mean while you were still in the sector even though you had been relieved and had not left the area. I am just wondering if the controller who relieved you communicated with you? Did he say anything to you at the time or after he cleared flight to descend immediately?

Answer. No, sir.

Mr. RANDALL. Whether the information that No. 1 went to lunch was accurate or inaccurate he was still standing around there. You read here, that he communicated with Detroit. He was standing there looking over radar controller No. 2's shoulder. Don't you think he was responsible for doing something even if he was just an interested bystander?

Mr. RYAN. Yes, sir.

Mr. RANDALL. But he didn't do it.

He was standing right there. Apparently he did not go to lunch. At least not right away.

I think perhaps we should have radar controller No. 1 in here, and maybe radar controller No. 2 also.

Is No. 1 well now, or is he ill? What is his situation?

Mr. BELANGER. He is ill, sir.

I think we should apprise you, Mr. Chairman, of the medical status of controller No. 1. As I understand it, he has applied for and is in the process of receiving an approval of medical retirement.

Mr. RANDALL. All right.

Let us go back to our hypothetical case for a minute or two, Mr. Ryan.

You have been at the Cleveland center for quite a while, haven't you?

Mr. RYAN. I have been in Cleveland center since May of 1974.

Mr. RANDALL. That is not too long.

I thought you had been there for several years.

Have you been in other control centers?

Mr. RYAN. Yes, sir.

Mr. RANDALL. How long were you in those others?

Mr. RYAN. I was in Washington center from 1956 until 1973 with 14 months out in Vietnam, in Saigon.

Mr. RANDALL. I've been down there three or four times myself.

You were over here at National Airport?

Mr. RYAN. No; out at Leesburg.

Mr. RANDALL. The one in Virginia?

Mr. RYAN. Yes; at Leesburg.

Mr. RANDALL. As you look back over those years of service, can you reconstruct in your own mind how many cases similar to our hypothetical case that we gave you a moment ago you know about?

Mr. RYAN. If you are talking about a situation where one aircraft is climbing through another——

Mr. RANDALL. That is right—coming at another.

Mr. RYAN [continuing]. In which the controller notices he has just had what he believes is a system error and reports it, there have been numbers of them. I wouldn't even speculate on them.

Mr. RANDALL. I understand there have been a lot of them.

How many would you estimate?

You were there at Leesburg from 1956 on. In other words, you have had this same type of job since 1956?

Mr. RYAN. Yes, sir.

Mr. RANDALL. On the one hand we hear the Administrator and all the folks down at FAA say, "Don't worry about anything—everything is all right." We have got so many millions of miles that we clock up right. And that is an impressive statistic.

But you have told us that there have been a lot of these instances. Can you say whether there have been 20, 30, or 40 in the years you have been there?

Mr. RYAN. I guess you would have to make a determination on what is "a lot," but I have seen those types of incidents occur.

Mr. RANDALL. Were they dangerously close?

Mr. RYAN. I have seen those types of incidents occur, and of course in the case of 500 feet that you mentioned, if you wanted to make a judgment on whether that is dangerously close, my judgment——

Mr. RANDALL. If you can look out a window and see your counterpart in the other window pretty well—you can almost tell what color suits they have on, can't you, at 500 feet?

Mr. RYAN. I think you said underneath 500 feet.

Mr. RANDALL. All right—less than 500 feet.

Mr. RYAN. In my judgment, 500 feet is not necessarily dangerously close, but that is my particular judgment.

The separation below 29,000 feet is 1,000 feet separation. In other words, that would be less than legal separation. And, in the incident that you mentioned to me, that would be a system error.

Mr. RANDALL. What is legal separation?

Mr. RYAN. One thousand feet vertically below flight level 290 below 29,000 feet.

Mr. RANDALL. Just a minute. One thousand feet below what?

Mr. RYAN. One thousand feet vertical separation at altitudes 29,000 feet and below.

Mr. RANDALL. What about above 29,000 feet?

Mr. RYAN. Above 29,000 feet, it would be 2,000 feet vertical separation.

In other words, if you had an aircraft at 29,000 feet, the closest that an aircraft above him could be would be 31,000 feet.

Mr. RANDALL. That is vertical separation.

What about lateral separation?

Mr. RYAN. In radar data processing, or in the narrow band mode, which all domestic centers are in, when they are operating in RDP, it is 5 miles separation—5 nautical miles horizontally. No less than 5 nautical miles.

Mr. RANDALL. Do you have only the two regulations or the two parameters? You have one vertical—1,000 feet up to ceiling 29, and then 2,000 above. Then you have a lateral separation of no less than 5 nautical miles?

Mr. RYAN. Yes, sir. What that amounts to is, if you don't have 1,000 feet, in other words, you have two aircraft at the same altitude, you cannot have less than 5 miles. If you have 1,000 feet vertical separation——

Mr. RANDALL. Would you back up a little bit? We have a long way to go on this. We are going to have some hearings coming down the road in a couple weeks on a matter pretty much similiar to this. Let us just interrogate a little and figure out some of these things.

You have two airplanes at what level?

Mr. RYAN. In other words, you either need lateral or vertical separation.

Mr. RANDALL. All right.

Now tell me about the two airplanes you started to speak of.

Mr. RYAN. OK. If you have 1,000 feet separation vertically in altitude, it is not necessary to have the 5 miles. If you do not have it—if you have less than the vertical separation which is 1,000 feet, then you must have at least 5 miles horizontal or lateral separation.

Mr. RANDALL. You are saying that one cancels out the other. Is that right?

Mr. RYAN. Yes, sir. In effect.

Mr. RANDALL. On November 26, everything had been canceled out. They were coming right toward each other.

Mr. RYAN. Yes, sir.

Mr. RANDALL. Do you have some sort of a sliding scale of this lateral and vertical separation criteria?

You say that if you have 1,000 feet vertical separation, it is not necessary to have 5 miles lateral separation. I thought you said there was a firm requirement to maintain the 5 miles lateral separation.

Mr. RYAN. If you have the 5 miles, then you do not need vertical separation.

In other words, you can take two aircraft at 29,000 feet——

Mr. RANDALL. Oh—it is the other way around. If you have got the lateral, you can forget about the vertical.

Is that it?

Mr. RYAN. If you have got the vertical, you can forget about the lateral.

In other words, there are two types of separation.

Mr. RANDALL. I follow you.

Mr. RYAN. The two are vertical and lateral. You must have one or the other.

Mr. RANDALL. Thank you. That has been helpful.

You never did give us any kind of a best estimate you may have of how many of these incidents there have been, but you said there have been a lot.

Can you recall whether there were 100, 50, or 75? You have been around a long time. You surely know whether you have one or two or three a year—or four, five or six a year?

Mr. RYAN. I cannot remember back to 1956 how many there might have been.

Mr. RANDALL. Let's just go back a few years. How many have you had in the last year or two?

Mr. RYAN. I can tell you how many we have had at Cleveland center.

Mr. RANDALL. We'd be glad to know.

Mr. RYAN. All right, sir. In 1976, we had two system errors. In 1975, we had 20 system errors. In 1974, we had 12 system errors.

Mr. RANDALL. I think we may have to look at what you mean by system errors.

What do you mean by system errors?

Mr. RYAN. When we have violated the appropriate minima. When there was less than the necessary separation.

Mr. RANDALL. We violated—who do you mean by "we"?

Mr. RYAN. I am talking about Cleveland center.

Mr. RANDALL. Whom did you report those to?

Mr. RYAN. Sir, if you will, I can read the exact definition.

Mr. RANDALL. Can you tell me who you reported those to?

Mr. RYAN. The procedure following a system error is that we call it in immediately to the regional communications center and then to Washington. Then, within 6 hours, we have to give a verbal report to the system command center in Washington, D.C., which further relays that to Mr. Belanger.

Mr. RANDALL. A verbal report is very good. When do you finally get around to doing a written report?

Mr. RYAN. Within 15 days of the incident.

Mr. RANDALL. A verbal report within 6 hours, and a written one in 15 days.

Mr. RYAN. Within 15 days we are to convene a System Error Review Board.

Mr. RANDALL. Mr. Belanger knows all about these, don't you? Now we come back to that review board again, don't we?

You always convene a review board, except when you have something really serious.

I am not trying to put words in your mouth, but you just did not do it in this serious matter.

Mr. RYAN. Somebody else was doing it.

Mr. RANDALL. Staff has suggested we ask you how many of these errors that you just reported to us—2, 20 and 12 over for these various years—how many of them were human errors.

Mr. RYAN. Sir, I do not have the exact information on how many were, but the majority of them were.

I would not say that 100 percent of them were, but I can find out exactly how many of them were human errors.

Mr. RANDALL. Perhaps we have been looking too much at one incident here. Perhaps we should look at the wider picture.

If there were human system errors, then, after we follow this section of FAA handbook 7210 3C through paragraph 426, Return to Operational Duty, and paragraph 427, Additional Training, we finally get down to paragraph 431, Disciplinary Action. Mr. Belanger, we would like you to submit information going back to 1970 or perhaps farther back than that. You have records of disciplinary actions taken in those years, haven't you?

Mr. RYAN. Yes, sir.

Mr. RANDALL. I want to follow through and see what steps you took in these human system errors. Was the controller involved always relieved of his duties? Or did the controller just go on happily ever after? I want to know what happened in all of these system errors. How many times was there any disciplinary action taken or reprimand issued?

Did anyone in FAA do anything other than just say everything is all right, and we'll start all over again?

Mr. RYAN. I can tell you in speaking for Cleveland center that of 1974, in the 12 system errors there was 1 letter of reprimand issued and the remaining were——

Mr. RANDALL. Only one letter of reprimand out of all the human system errors that you have just mentioned?

Mr. RYAN. In 1974, there were 12 system errors. We issued one letter of reprimand, and the remaining system errors—or the people involved, I do not know the exact number of people—were issued oral reprimands.

Mr. RANDALL. You told the controller, just do not do it again or something like that. Is that right? Is that an oral reprimand?

Mr. RYAN. You could characterize it that way.

Mr. BELANGER. Mr. Chairman, I think we should——

Mr. RANDALL. I don't want to talk to you about this, Mr. Belanger. I want you to assemble this data. They are all recorded in your office aren't they?

Mr. BELANGER. That is right.

Mr. RANDALL. I want you to give us the records you have down there at air traffic. We are going to find out what is being done to those controllers who are careless and negligent. Are you simply saying, be good, and don't do it any more?

In the military there is an individual personnel file called the 201 file. In the military, you very jealously try to keep your "201" file clear of a record of disciplinary matters of any kind because you might want to be promoted some day.

All of your controllers want to be promoted, don't they? They all want to become supervisors or something like that. Isn't that how they come up through the ranks?

Mr. RYAN. I can't speak for all wanting to become supervisors, but that is an avenue of progression.

Mr. RANDALL. Maybe they do not want to become a supervisor.

Mr. RYAN. Some of them do not.

Mr. RANDALL. All right.

I think we need to see what has been done in the past within FAA, Mr. Belanger. Perhaps we are devoting too much time to the November 26, 1975, accident. But this is a very serious matter on November 26.

I am not sure what has been done in this case except that radar controller No. 1 has been worrying about what almost happened. You say he has become ill. Is that right?

Mr. BELANGER. Yes.

Mr. RANDALL. We are not trying to harass radar controller No. 1. We are trying to learn something about the accident to see that such an accident does not happen again, and to insure that FAA has done something about it.

Mr. BELANGER. Mr. Chairman, I would like to explain what does happen when a system error occurs and when we have identified the fact that it was a human error. I say that humans do make mistakes. We are not perfect. What we try to do is cut down the probability.

On an average, a controller makes an error every 42 years or 2 million control instructions, I am sorry, but they do make them. They are human beings. They do make mistakes—not intentionally. Very, very rarely is it done by intent or carelessness. These are not things that happen very often.

Our business is a very serious business. We have people's lives in our hands. I have seen controllers who have made a system error

immediately end up in the washroom heaving their guts out. That's how seriously we take this business.

What we do as a responsible management group is, when a man has made a system error, we immediately decertify him; he is no longer able to control traffic.

He then has to go through a recertification process. In other words, his job is on the line. It is not a suspension or a reprimand. It is his job that comes up on the line. He has to re-prove himself.

Mr. RANDALL. You say this is now a routine procedure.

Mr. BELANGER. Yes, sir. For every system error that a man is involved in, he is fundamentally decertified in his abilty to control traffic, and he has to re-prove himself.

Mr. RANDALL. He has to re-prove himself, you say, every time he is involved in a system error?

Mr. BELANGER. That is correct.

Mr. RANDALL. Mr. Belanger, you can stand off and look at this accident of November 26 in a fairly objective manner, can't you?

You were not out there—not right down at the nitty-gritty level.

Do you think that from November 26 until December 14, controller No. 1 had an opportunity to re-prove himself?

Mr. BELANGER. No, sir. As I understand the process at Cleveland Center, he was placed on the operating position under close supervision, and in that facet he re-proved himself.

Mr. RANDALL. I did not ask you that question.

You look at this from a distance. Do you think that 2 weeks was enough time?

You say he was decertified? If you decertify somebody, you have got to recertify him.

Mr. BELANGER. That is correct.

Mr. RANDALL. Who recertified No. 1? Did Mr. Ryan? Did he ever decertify him?

You said this is true in every system error, didn't you? You just finished saying this?

Mr. BELANGER. That is the procedure that takes place in a system error.

Mr. RANDALL. Well, a system error in this case is a human error, isn't it?

Mr. BELANGER. That is generally correct.

Mr. RANDALL. All right.

There are a lot of things that are missing here.

Mr. BELANGER. The technique of recertification can take many facets. It depends on the error—what the man did.

We have verbal communication—the "nine" or "five" type of thing where you misunderstood what someone said.

This is a typical sort of error in communications. Five and nine are words that sound alike. We deal a lot in numbers. A man might have thought another man said five when he said nine.

That type of an error is a little harder to cure. So it depends just on what the circumstances were.

But one of the techniques for recertification is to place the man on the operating position, under immediate supervision, until that supervisor in fact is satisfied that he can perform the job in an adequate, safe manner.

This is what I understand took place.

Mr. RANDALL. In your exposition a minute ago you also said that after this decertification had taken place there has to be a recertification, and then you used the words "re-prove himself."

Mr. BELANGER. That is correct.

Mr. RANDALL. Mr. Belanger, you have been around a long while. Mr. Ryan has been around since 1956. You must have watched many of these decertification-recertifications. Does a 2-week recertification process seem a reasonable time in a matter of this importance?

Mr. BELANGER. Yes, I think so. He was not in a recertification process those 2 weeks. I do not want to mislead, as I understand the details.

He went into the recertification process after the 2 weeks. He was in a cooling off period.

Mr. RANDALL. But he went right back on his old job, didn't he?

Mr. BELANGER. Under recertification.

Mr. RANDALL. We are going to let Mr. Ryan testify. He knows that. Didn't he go right back on his old job?

Mr. RYAN. Yes, sir.

You cannot be recertified in a vacuum. For instance, let's talk about November 26 to December 14.

As I testified last Tuesday, I explained—and I can go back to the actual details—what controller No. 1 was doing on each and every day up to and including December 14. But he had not returned to controlling traffic before December 14.

Mr. RANDALL. But he went back to work on December 14. He had not yet been recertified. You were just giving him a trial again. Is that right?

Mr. RYAN. I think what we are saying is, how does one be recertified?

Mr. RANDALL. He was right back on his old job, wasn't he?

Mr. RYAN. That is the only way to be recertified. Or, not the only way, but that is one way to be recertified.

Mr. RANDALL. Don't you think it might have been wise to place him on another job and see how he does there? But you put him right back on his job, didn't you, on December 14?

Mr. RYAN. Right. Under supervision.

Mr. RANDALL. What kind of supervision? Was somebody looking over his shoulder?

Mr. RYAN. Yes.

Mr. BELANGER. Mr. Chairman, I would not consider anyone recertified until he had demonstrated on the actual control position his ability to control traffic. I would not accept a classroom control-type thing. I would like him to go under supervision and demonstrate his capability with aircraft. I would not go by some classroom thing.

Mr. RANDALL. That makes sense.

Did you get any reports from the supervisors, Mr. Ryan?

Mr. RYAN. Yes, sir.

Mr. RANDALL. From your boss out there? Did you get any reports from these supervisors who were watching No. 1?

Mr. RYAN. Yes, sir. And I got reports from some almost every day that he was working.

Mr. RANDALL. Almost every day, but not every day?

Mr. RYAN. No, sir.

Sir, I would like to mention, to go back to 427 again, that it talks about, in 427(b), a reevaluation of the employee on the position/positions to determine the necessity for additional training.

Mr. RANDALL. We have many more questions to ask you.

Staff has just suggested a question that has to do with the handbook.

You have had conversations with radar controller No. 1? You talked with him all the time, didn't you?

Mr. RYAN. Yes, I talked with him often.

Mr. RANDALL. I pondered the thought of putting you under oath, and then we decided against it.

I want you to be sure to recall this.

Did you, at any time, say to radar controller No. 1 that he could return to his old position when he felt ready?

Think about that. Did you tell him he could do that?

Mr. RYAN. Yes, I did.

Mr. RANDALL. When did you tell him that?

Mr. RYAN. We had many discussions between November 26 and the time that he went back to work which was December 14, which happened to be a Sunday.

But it seems to me that particular statement—you are asking me when I made that particular statement—I believe it was made either December 11 or December 12.

Mr. RANDALL. You told him that some time before December 14?

Mr. RYAN. Yes, sir.

When I mean go back to work. I mean going back to begin the recertification process in order to build his confidence and for me to——

Mr. RANDALL. I now refer you to the NTSB deposition transcript on page 38. This involves radar controller No. 1.

Someone with the National Transportation Safety Board asks No. 1:

Question. Have you been performing your control duties in a regular manner in your work with the shifts and the sectors in the normal routine manner since the date of the accident?

Answer. No, sir.

Question. Is there any particular reason why you have not?

Answer. Just of my own choosing until this was over.

Question. Just a matter of personal choice?

Answer. Yes, sir.

How does that fit in with the comment that you just made that he could go back when he felt ready?

Did you leave it all up to him even after a statement like this by No. 1 that he did not want to go back? Did you put him back anyway? Is that right?

Mr. RYAN. No, sir; I do not think that is right.

Mr. RANDALL. All right. What is it then?

Mr. RYAN. It says, is there any particular reason why you have not? And he says, just of my own choosing. I think your question was, if he did not want to go back——

Mr. RANDALL. But you said to him, what he told you—there is another place in the deposition where you told him he could return when he felt ready. Isn't that right?

You said a minute ago that you said it.

Mr. RYAN. That is right.

I do not understand what the question is.

Mr. RANDALL. The question is, at the bottom of page 38, No. 1 said that he just did not want to return until the whole thing was over. Did you listen to him; did you talk with him about that?

Mr. RYAN. Yes.

Mr. RANDALL. You put him back, though, on December 14?

Mr. RYAN. Yes; because he said then that he wanted to go back to work.

Mr. RANDALL. Some time after he made this statement, he said he wanted to go back?

Mr. RYAN. That is correct.

Mr. RANDALL. Mr. Ryan, you are the man who put him back to work, aren't you?

Mr. RYAN. Yes, sir.

Mr. RANDALL. You must have reached the conclusion that he was ready?

You said you have not read these depositions, but you say you were present at the hearing. In your mind, you must have concluded that he was ready even before he felt he was ready.

Mr. RYAN. It is a kind of chicken and egg situation.

In other words, I would be ready to start recertifying controller No. 1 as soon as possible following November 26. I would be ready to start that recertification process if, in fact, controller No. 1 was willing to go to work.

I did not want to force controller No. 1 into a situation that might damage his confidence and further upset him.

In a conversation I had with him, I said, I want you to be a valuable person at Cleveland center. I want you to go back to work. I want you to gain your confidence. I think that, the sooner you go back to work, the better off you will be. But I do not want to force you into this situation prematurely and sooner than you wish to go back.

He told me at that time, "Let us wait until after the hearing, and then I think I would like to go back to work." Because the hearing was an unknown to him, how strenuous it would be, how deep it might be, how traumatic it might be for him, how much it might upset him—because he was upset already.

Mr. RANDALL. Of course, we all have sympathy with this controller who was upset. But we are also talking about putting a man back who was so upset that he could imperil lives again.

You want to restore this man, and that is worthwhile.

But don't you believe that, of greater, more dominant and paramount importance, is the possibility that this accident could be repeated by this same controller who is obviously nervous? And yet you put him back on December 14.

Mr. RYAN. Sir, if I do not go through a process of determining whether he is competent and whether he has regained confidence, then I will never put him back.

There must be some procedure to go through to determine if, in fact, the gentleman will ever work traffic again. I cannot make an unequivocal statement that, "You'll never go back and work. That is it for you, controller No. 1."

I have to determine, No. 1, what caused the accident? Was it an inadvertent action on his part? How must I, in protecting the integrity of the air traffic control system, while still trying to play a human role with the controller involved—how I can get him back to work and still protect the integrity of the system. There has got to be a procedure to do that, and, in fact, that is described in paragraph 427, which is the one that I used.

I could not make an unequivocal statement and say, "You are never going back." What would this be based on? I couldn't do that, sir.

Mr. RANDALL. The sequence here is rather important.

You never convened a System Error Review Board because you thought the National Transportation Safety Board was going to do the job. They apparently did do the job and they made some pretty strong findings.

I assume you would have some respect for those findings at this point, wouldn't you, with respect to whether he went back to work or not? At this point?

Mr. RYAN. Yes, sir.

Let me make a point about a System Error Review Board, when a system error occurs. We go back to paragraph 426: "After preliminary investigation, employees found not responsible for contributing to the error." Here I am talking about a preliminary investigation that can take place right now. In other words, if things are obvious, within an hour or two following the incident that happened, for an obvious type of error. You say, "You are not involved because I can tell that right off the bat." I can put that gentleman right back to work, if, in fact, he is not somehow so upset and would rather not work.

Now, I am talking about somebody who is involved. I have made a preliminary decision that he is involved. It is not necessary for me to wait 15 days until I convene a System Error Review Board to find out what they say before I go into some kind of a recertification process. A recertification process and retraining is not considered to be disciplinary action.

If I, as a facility chief, determine that a controller has contributed to an operational error, I can start his recertification immediately.

Mr. RANDALL. Apparently, Mr. Ryan, you are the one man, or you are the jury or the judge or the prosecutor, you are responsible for making these decisions out there. You say you passed it over to Mr. Bosslett.

I am impressed by what you can do preliminarily. You say you were there. You say you went down there that night.

Mr. RYAN. Yes.

Mr. RANDALL. The facts are, that you must have thought, some place along the line, there was some gross negligence or carelessness or you would not have removed the man right then and there. Or why did you remove him?

The question is this: When, if ever, did you make a determination that this radar controller No. 1 was, on the one hand, careless or negligent through omissions, or that he was not negligent and careless? And when did you make that determination? There is the key to this whole thing.

Mr. RYAN. In the case of determining whether or not disciplinary action is warranted, or what type, in the case of controller No. 1, I would like to read something to you from the same handbook.

Mr. RANDALL. I am not asking you what the handbook says. I am just asking you when you made a decision. You do not have to read the handbook. Did you make a decision that radar controller No. 1 was negligent, or not negligent? Which was it?

Mr. RYAN. I made a decision that it was not negligent. I made that decision.

Mr. RANDALL. You made that decision?

Mr. RYAN. Yes, sir.

Mr. RANDALL. Before the National Transportation Safety Board or anyone else had acted or made any findings? You said you did not want to interfere with their investigation.

Mr. RYAN. No, sir. I did not say that I made it before then. I said that I made it.

I said that I made a decision that the action was not negligent; that controller No. 1 was not negligent.

Mr. RANDALL. You have certainly read the report. You have the NTSB report. Would you stand on your decision today in the face of their report?

Mr. RYAN. Do you mean, do I continue to have the opinion that I stated?

Mr. RANDALL. Yes. In the face of their hearing and report.

Mr. RYAN. Sir, I could not make a formal disposition of disciplinary action prior to February 25 at 6:30 because I am told here, in the case of an accident or incident resulting in an NTSB investigation, that it may be necessary to delay disciplinary action until the termination of the investigation or hearing.

Mr. RANDALL. Mr. Ryan, we are not talking about disciplinary action. You may or may not get around to that sometime. But at some point you reached the conclusion that this man was not negligent or careless.

You concluded that he was not.

Is that right?

Mr. RYAN. Yes, sir.

Mr. RANDALL. When did you finally reach that conclusion?

Mr. RYAN. I do not have any specific date that I reached that particular conclusion.

Mr. RANDALL. You must have reached it before December 14 when you put him back to work.

Mr. RYAN. No, sir.

Mr. RANDALL. Did you put him back to work without determining whether or not he was careless or negligent?

Mr. RYAN. Is there a basic assumption on the part of the chairman that disciplinary action must take place prior to a controller being returned to an operational position?

Mr. RANDALL. I would not call that an assumption. I think it would be a good procedure.

Mr. RYAN. No, sir.

Mr. RANDALL. You would not put a man back who had been grossly negligent.

Mr. RYAN. No, sir. That is not the procedure.

Mr. RANDALL. What is the assumption then?

The Chair is not making any assumption. The Chair is simply looking at this case in an ordinary, commonsense manner, and it seems that you should not put a man back to work who has been careless or negligent—particularly where the resulting accident involves 306 lives.

That is why we have asked you to testify Mr. Ryan.

Mr. RYAN. It was my determination that he was not careless and negligent. But, supposing he was, and if, in fact, I decided to give him a 30-day suspension, or a 10-day, or a 3-day, or whatever disciplinary action was necessary, this would in no way mean that he would remain in some limbo status not working a position until I had enacted the disciplinary action.

This is because through an appeal process it could be months before I would ever get the action started.

In other words, after it had been approved, grievances might be filed.

Mr. RANDALL. We understand that, as far as Civil Service is concerned, it is almost impossible to fire someone any more. You have got all the appeal procedures.

We are not talking about these procedures. We are talking about why you put the man back to work. And you did.

We all know that they have all these appeal procedures. Everybody knows that.

I am asking you that one question again—when did you reach the conclusion that he was not negligent or careless after November 26?

Mr. RYAN. After December 12.

Mr. RANDALL. After he was back?

Sometime between the 12th and the 14th? Or sometime after December 12?

Mr. RYAN. Sometime after December 12.

In other words, based on the indepth hearing conducted by the NTSB, where all the information came out, I had made my decision subsequent to December 12.

Mr. RANDALL. There had been no hearing at that date. When you asked him if he felt ready, and when he said, "no; he didn't think so," there had been no hearing at that point.

Mr. RYAN. Sir, it appears that we are back to the same assumption that, whether or not I intended to take disciplinary action, whether the man was careless or negligent, it seems to be the feeling on the part of the chairman that I should not return him to duty if, in fact, I am going to take disciplinary action.

Mr. RANDALL. I think that is a fair and good belief to harbor. Yes; I do. And I will ask you, Mr. Ryan, have you ever yet taken any disciplinary action of any kind against radar controller No. 1.

Mr. RYAN. No, sir.

Mr. RANDALL. No letter of reprimand, no oral reprimand, nothing at all?

Mr. RYAN. Let us go back to the circumstances involving the departure of controller No. 1 from Cleveland center.

Mr. RANDALL. Departure? When he became ill?

Isn't that right?

Mr. RYAN. That is right. He became ill.

Since January 20——

Mr. RANDALL. And we all feel sorry for him. We all do, honestly. Believe me.

I am just asking what you have done, not what he did. He just got sick. Isn't that right?

Mr. RYAN. Yes, sir.

Mr. RANDALL. Up to this point, what have you done?

Mr. RYAN. You are asking me what have I done with regard to——

Mr. RANDALL. As far as any conclusions. In other words, Mr. Ryan, do you still hold to your view that there was no negligence or carelessness even after reviewing the National Transportation Safety Board report?

Mr. RYAN. Sir, to repeat, I do not believe that controller No. 1 was careless or negligent.

No. 2, it is rather a moot point now, in that the person will never return to work.

Whether to take disciplinary action of a lesser degree than carelessness or negligence—to suspend him or issue him a letter of reprimand or an oral reprimand is a moot point when the gentleman is never coming back to work. What is it that I am disciplining him for? He is not a member of Cleveland center except to be on the rolls and be paid. He has been permanently——

Mr. RANDALL. He is still being paid, though, isn't he?

Mr. RYAN. He is permanently disqualified under the provisions of Public Law 92–297.

Mr. RANDALL. What does that call for?

Mr. RYAN. It is called the second career act.

I do not know if you have our handbook 3410.11(a)?

Mr. RANDALL. You say he was permanently disqualified under this?

Mr. RYAN. Yes, sir. Permanently medically disqualified.

Mr. BELANGER. Mr. Chairman?

Mr. RANDALL. Yes, Mr. Belanger?

Mr. BELANGER. Could we go off the record a minute, and, if you desire, you can put this on the record.

Mr. RANDALL. Yes.

We will go off the record for a minute.

[Discussion off the record.]

Mr. RANDALL. Back on the record.

This is no criticism of you, Mr. Ryan. It is just the case that, somewhere along the line, someone has not done what he should do, and that is something that needs to be corrected.

You said this gentleman was not careless or negligent. You say that in the face of this report, is that correct?

Even the National Transportation Safety Board conclusions have not changed your mind?

[Mr. Ryan shakes his head.]

Mr. RANDALL. Say yes or no. We cannot tell if you only nod your head.

Mr. RYAN. No, they have not changed my mind. There weren't any surprises in the report.

Mr. RANDALL. A hypothetical case.

Have you ever put anything in writing—but I guess nothing has ever been written about this anywhere; it has all been verbal.

Mr. RYAN. There is an accident report.

Mr. RANDALL. What about Mr. Bosslett? Did you ever give anything to Mr. Bosslett after you made your decisions?

Surely Mr. Bosslett has something in writing? Where is Mr. Bosslett located?

Mr. RYAN. In Chicago, in the Great Lakes region.

Mr. RANDALL. Is Mr. Bosslett over Mr. Wubbolding?

Mr. WUBBOLDING. No: Mr. Bosslett works for me.

Mr. RANDALL. Underneath you? All right.

Surely you put your determination of carelessness or negligence in writing. Did you ever put that in writing?

Mr. RYAN. Well, sir, it would be rather strange to put something in writing that somebody wasn't careless or negligent.

If he was careless or negligent——

Mr. RANDALL. It was a pretty important matter, though, wasn't it?

Mr. RYAN. If he was careless or negligent, or if I proposed disciplinary action, or if I had taken it, of course that would be in writing.

Mr. RANDALL. I will ask you this: If you determined a man to be careless and negligent, would you ever put him back to work before taking disciplinary action?

In other words, you must have reached a conclusion that he was not careless and negligent because you put him back to work.

Mr. RYAN. We are back to——

Mr. RANDALL. No. This is a hypothetical question.

Mr. RYAN. In answer to your question—if I found someone to be careless and negligent——

Mr. RANDALL. You would not put him back to work?

Mr. RYAN [continuing]. I would recertify him.

In other words, I would have to put him back on a working position the way that Mr. Belanger explained earlier to see if he can control airplanes.

Mr. RANDALL. Would you let him work before you took disciplinary action even if he was careless or negligent?

Mr. RYAN. Yes, sir.

Mr. RANDALL. If you can do that under your regulations, then we have hit the jackpot.

If you find that a controller is careless or negligent, and you can put him back to work without taking disciplinary action, perhaps that is what these hearings are all about. That is the important point. That is the most I can say at this time.

Do you think you have the authority to put him back to work even after you find him negligent and careless—you can put him right back on the job?

Mr. RYAN. Recertify him.

Mr. RANDALL. Well—back to work, isn't he?

Mr. RYAN. Operating under supervision.

If in the recertifying——

Mr. RANDALL. Under whatever qualifications or considerations, he has gone back to work.

Mr. RYAN. If, in the recertification process, we found out that certain deficiencies have been revealed, then we take appropriate retraining action.

You mentioned before that you understood about the length of time with appeals, grievances, and what have you, it would take before I may actually be able to initiate the disciplinary action in question.

Mr. BELANGER. Mr. Chairman, you have Mr. Ryan in somewhat strange territory. Carelessness or negligence in our business is a very serious charge.

Mr. RANDALL. I would hope so.

Mr. BELANGER. The number of times this occurs is very infrequent. I cannot think of anyone who has had that type of charge. We consider that total dereliction of duty—something almost akin to criminal-type conduct.

Mr. RANDALL. Mr. Belanger, you are beginning to talk like we thought you should.

Negligence must be almost criminal? Those are your words?

Mr. BELANGER. That is correct. A determination of carelessness or negligence is not taken lightly.

Mr. RANDALL. The record is very clear that in this case it was taken lightly, apparently.

Mr. BELANGER. Mr. Ryan did not determine that there was carelessness or negligence. The familiarity or the exposure to this type of improper action on the part of our employees is very rare.

I do not believe that Mr. Ryan has had any exposure or any experience with that type of conduct.

Mr. RANDALL. That is why we are asking these questions.

The staff has some questions for you.

Mr. ROMNEY. Mr. Belanger, following up on this point, you had indicated that Mr. Ryan had, prior to this time, indicated that in 1974 there was 1 letter of reprimand and there were 12 oral reprimands.

In each, was there a prior finding of negligence or carelessness?

Mr. BELANGER. I will defer to Mr. Ryan.

Mr. RYAN. In the case of the letter of reprimand, the wording—I am doing this off the top of my head so I do not have the exact words—as I recall was that the gentleman who got the reprimand was careless.

Mr. RANDALL. He was what?

Mr. RYAN. He was careless.

Mr. RANDALL. Yes. And what else?

[Mr. Ryan shakes his head.]

Mr. ROMNEY. What about the oral reprimands?

Mr. RYAN. No carelessness or negligence there.

Mr. ROMNEY. This is a form of disciplinary action. Is that not correct?

My question is, is disciplinary action contingent upon a prior finding of negligence or carelessness?

Mr. RYAN. No.

Mr. ROMNEY. I recall that you indicated, or Mr. Belanger indicated, that, in our testimony last week, when we were referring to the Department of Transportation, Federal Aviation Administration order entitled, "Conduct and Discipline, No. 3750.4," reprint July 1, 1974, we had referred to page 6 of the appendix, item 17, the "Nature of the Offense"—this was appendix 2—at the bottom of this page:

Is the offense negligent or careless work performance resulting in waste of public funds, damage to materials, delay in production, injury or loss or danger of loss of life?

Then the penalties prescribed for such an offense would be: "Written reprimand to removal," "10 days suspension to removal," or "removal."

In your testimony, Mr. Belanger, you indicated that this paragraph 17 is applicable.

Would you elaborate on that, and particularly since, in this case, we did have a performance which resulted in injury to the passengers aboard one of the aircraft.

Mr. BELANGER. What I said was that the paragraph would be the one we would apply to a system error if the man were found to be careless or negligent. Mr. Ryan states in his opinion he did not find that there was evidence of carelessness or negligence.

I do not know if I am answering your question.

Mr. ROMNEY. Therefore, you have indicated that, in the cases of an oral reprimand, you do not have to find carelessness or negligence?

Mr. BELANGER. That is an informal disciplinary action, not a formal action.

If you recall our testimony the other day, the chairman asked where the dividing line was on formal disciplinary actions. It begins with a letter of reprimand.

Mr. ROMNEY. Can you give me an example of a case of negligence or carelessness that would not qualify in this case, and compare that with the case that we are concerned with today in the November 26 incident?

Mr. BELANGER. Are you asking me what I would consider an example of negligence or carelessness in terms of control procedures?

Mr. ROMNEY. Yes.

Mr. BELANGER. I would consider a man negligent if he were talking about the Redskins football game or this or that or the other thing instead of paying attention to his duties, I would consider the man did not apply proper procedure. I do not mean separation procedures. We have ground rules and letters of agreement—you shall not enter my air space unless you get approval; you will fly at the correct altitude for this direction of flight. If the controller were to violate one of those rules of the road, I would consider that either careless or negligent. Yes, sir.

Mr. ROMNEY. Do you have the standard for a definition for carelessness and negligence which is understood by you and by the personnel involved in a case like this?

Mr. BELANGER. No, I do not. That is very difficult to articulate on. It is a judgmental factor on the part of the supervisor and the people doing the investigating.

Mr. ROMNEY. What is the meaning of carelessness or negligence? What definition do you use?

Mr. BELANGER. I cannot give you a legal definition. I am not a lawyer or a judge.

Mr. ROMNEY. Would you not say that it is important that there be a standard or a definition which you can use?

Mr. BELANGER. There is no substitute for judgment. The judgment is, was the man endeavoring to do the job in the proper manner? Was he adhering to the proper procedures? Was he or was he not derelict in his duties? Was he goofing off or not?

It is a judgmental factor, and I do not know how to put a definition on it.

Mr. ROMNEY. There are definitions for the terms, are there not?

Mr. BELANGER. The definition in the dictionary, I am sure, it is equally ambiguous.

Mr. ROMNEY. Let's listen to one. Let's listen to a dictionary which probably would be used by someone concerned with this case. Let's listen to a law dictionary's definition of this.

Black's Law Dictionary:

> Negligence is the omission to do something which a reasonable man, guided by those ordinary considerations which ordinarily regulate human affairs, would do. Or the doing of something which a reasonable and prudent man would not do.

They go on:

> The term refers only to that legal delinquency which results whenever a man fails to exhibit the care which he ought to exhibit whether it be slight, ordinary, or great.

In another law dictionary:

> Negligence is a word of broad significance which may not be readily defined with accuracy: The lack of due diligence or care; a wrong characterized by the absence of a positive intent to inflict injury but from which injury, nevertheless, results. In the legal sense, a violation of the duty to use care.

The legal definition and the nonlegal definition may be two different things in some people's minds. They perhaps are in the minds of some courts.

I am trying to pin down the fact that, if you, as a supervisor, need to make a determination of negligence, you do not have to have a standard of what that negligence constitutes.

Mr. BELANGER. The standard I would use would be——

Mr. ROMNEY. Excuse me. Is there one that is independent of your own mind?

Mr. BELANGER. No. There is not.

It is a judgment of the supervisor involved as to whether the man was or was not negligent based on the particular case, and the procedures expected, and the actions he would or should take under normal conditions.

Mr. RANDALL. But, Mr. Romney, Mr. Belanger did not have to make that decision. Mr. Ryan had to make that decision.

You have read two of three definitions there.

Counsel is leaning over there trying to assist the witnesses.

What we are talking about is the degree of care taken by the controller. Was it slight, or was there lack of care? What happened?

I have read this National Transportation Safety Board report, and they found that there was a lack of care.

We are asking you, Mr. Ryan, what kind of a standard did you apply, when you made your determination of carelessness or did you apply any standards at all? Did you apply a definition of negligence?

You have heard the definition. You said he was not careless or negligent, didn't you?

Mr. RYAN. Yes, sir.

Mr. RANDALL. Don't you think it is well to have learned something from this—to have some kind of definition? Has anyone provided you with a definition of carelessness or negligence?

There is information that there may be some claims by those who were injured. At this point, we do not know whether the Government is involved in liability or not. But, assuming that the Government is involved in liability and is liable for these injuries, and, some place along the line, unless you pay them off in full, everything they are asking, there is going to be a jury consideration.

Some finder of fact is going to say whether it was carelessness or negligence or not. Somebody is going to have to have a definition in court some day. That is all we are talking about here.

With that preface, Mr. Ryan, I will ask—did you apply any measure in your own mind, a definition of negligence, or any kind of a standard?

Mr. RYAN. Webster's dictionary.

Mr. RANDALL. You looked it up in the dictionary?

Mr. RYAN. Yes, sir.

Mr. RANDALL. Before you reached the conclusion?

Mr. RYAN. I wanted the definition of what carelessness is.

Mr. RANDALL. You went to Webster's dictionary and looked it up. What did you find?

Mr. RYAN. I do not have the dictionary with me now, but I recall I looked it up.

Mr. ROMNEY. Did you find inattention? Inattentive?

Mr. RYAN. I think these are all matters of degree.

For instance, it says carelessness or negligence. I do not believe that carelessness and negligence are of the same degree. Carelessness seems to be a cut below negligence.

Then there are things that are a cut below carelessness. There are many synonyms for carelessness with which I do not necessarily agree.

Mr. ROMNEY. But you did not find carelessness?

Mr. RYAN. No, sir. I think it was an inadvertent error.

The gentleman was conducting the business that he is paid for—that is, the business of a controller. In the case of trying to make that input message on the Lear Jet, he became caught up in that.

Mr. ROMNEY. You did not find, then, that the controller was inattentive?

Mr. RYAN. No, he was attentive at what he was doing.

Mr. ROMNEY. And you did not find that he did not use due care?

Mr. RYAN. It would be hard for me to say that he used due care.

Mr. ROMNEY. How can you square this with the finding of probable cause which the chairman has read for the record earlier in the hearing?

Mr. RYAN. Do you mean, does my conclusion as to whether he is careless or negligent—do they equate with what the NTSB has said?

The NTSB was very careful not to say, I believe anything about carelessness or negligence. I am not so sure that they may be their terms that they try not to use at all times. I am not sure.

Mr. ROMNEY. Can we be sure here? Is it their function to find carelessness or negligence?

Mr. RYAN. I do not know whether it is their function, under probable cause, I do not know whether they would use those words, carelessness or negligence. I don't know. Maybe they avoid them purposely. I do not know.

Mr. ROMNEY. It appears that the finding of the National Transportation Safety Board is that controller No. 1 became preoccupied.

Mr. RYAN. Yes.

Mr. ROMNEY. What I am suggesting is that becoming preoccupied is an element of carelessness.

Would you agree?

Mr. RYAN. It depends on what he was preoccupied with.

Mr. ROMNEY. If you were preoccupied with something that diverted you from your primary duty?

Mr. RYAN. In an embellishment on Mr. Belanger's example—if I were preoccupied with talking about my golf game and consequently an accident or system error occurred, I would say that that was negligence. It was careless.

If I am preoccupied in doing the duty for which I am being paid to do—in this particular case trying to put an input message in on a Lear Jet—then I must say that that is preoccupation of a different kind and of a lesser degree, if preoccupation, in fact, is careless.

I think that is what your point is.

Mr. ROMNEY. At the time that he was relieved, and briefed controller No. 2, he did not mention the potential conflict.

Mr. RYAN. No, he did not.

Mr. ROMNEY. Would you call that inattentiveness, or would you call that preoccupation? How would you characterize that?

Mr. RYAN. It is hard for me to characterize it. We are getting into——

Mr. ROMNEY. Would this be carelessness?

Mr. RYAN. No, it would not be carelessness.

Mr. RANDALL. It would not be carelessness? Did I understand you correctly? Is that your answer?

Mr. ROMNEY. Yes, that was his answer—that it would not be.

Mr. RYAN. I could make some speculations from the report, although perhaps I should not. But I am talking about Mr. Romney's——

Mr. RANDALL. We are talking about the same thing.

Mr. RYAN. We are talking about preoccupation.

Mr. RANDALL. Radar controller No. 1 is watching the Lear Jet. He does not see the two scheduled airlines about to collide in the sky.

You say that is not carelessness or negligence?

Mr. RYAN. That is correct.

Mr. RANDALL. We will carry this line of questioning just a little further, Mr. Ryan.

This gentleman, radar controller No. 1, did not say anything about the impending collision, did he? That is, when he left, when he turned control of his sector over to No. 2?

Mr. RYAN. No, sir. He did not mention it in the briefing.

Mr. RANDALL. Doesn't that indicate some carelessness or negligence right there? Or don't you believe that is an example of carelessness or negligence?

Mr. RYAN. No, I do not.

I think we have to talk about the reasons behind why certain actions are done.

Mr. RANDALL. That is consistent with what you have said. But it does not make much sense, in the judgement of the Chair, to find a controller not careless or negligent when he doesn't tell the relieving controller what is going on, and simply walks off.

That is not negligence or carelessness, in your judgment?

Mr. RYAN. That is correct.

Mr. TEMPERO. Mr. Chairman?

Mr. RANDALL. Yes, Mr. Tempero.

Mr. TEMPERO. Let us change the fact of the situation just slightly. Let us say that controller No. 1 was not relieved, that controller No. 1 continued to try to put the Lear Jet into the system, and those two blips on the screen had merged and the planes had both gone down.

What would your considered opinion be in that case? Would there have been any carelessness or negligence involved?

Mr. RYAN. What was the reason that the two airplanes ran together. Was he preoccupied?

Mr. TEMPERO. The very situation we have here now, except he continues to be preoccupied with what we have been told is a secondary duty.

He was not relieved. He continued to try to make the computer take the Lear Jet rerouting. In that process there was a collision. Not just an accident. A collision.

What is your analysis of the responsibility of controller No. 1? Does his preoccupation become careless and negligent now?

Mr. BELANGER. Let us——

Mr. RANDALL. Let Mr. Ryan answer the question, please.

Mr. RYAN. We would have the same situation but with a different outcome.

We are saying now, because the outcome is different, the judgment as to whether the person was careless or negligent would then be different.

Mr. TEMPERO. I think the point we are trying to make is your definition of carelessness and negligence is inadequate. As I understand it, the controller has to be—I believe the words were "goofing off." I believe those were Mr. Belanger's words.

The point we are trying to make here is carelessness and negligence carry with them the connotation of the reasonableness of a prudent man carrying out given responsibilities.

What you are saying is your definition of carelessness and negligence do not include that. You are saying that, if the controller is "goofing off," or reading a paper or drunk, then he is careless or negligent.

What we are trying to say is, taking the facts of a given situation into consideration, if a man does not perform given duties within the parameters that a reasonable man could be expected to perform those duties, he may be careless and negligent.

What we are asking you to do is to think very seriously about that, and, in fact, if this is true throughout the FAA system, I would suggest the FAA should think very carefully about what this reasonable man prudently does.

Forgetting this particular situation, and talking just generally, I think this is a very important concept and it cannot go unnoticed. Certainly, if you ever go to court on one of these, it would not go unnoticed.

Mr. BELANGER. If you have asked a general question, I guess it would be permissible for me to answer?

Mr. RANDALL. We want Mr. Ryan to respond after a while, too.

Mr. BELANGER. Getting back to the case in point, I do not know how you equate these things.

If we were to go around and look at the case, the facts are that controller No. 1, in all probability, forgot he had a potential conflict. Why he forgot, I do not know. Because he became involved in the other situation?

He forgot. The question is, did he forget because he was careless or negligent? The Board did not say those words. It says, he failed to apply separation.

You ask, if he stayed on the position, what would have happened? If he was aware of it, he would have done something.

Somewhere along the line, he forgot about it.

Mr. TEMPERO. We agree he forgot. The crucial question is, was he careless and negligent because of his act of forgetting. In other words, was he careless and negligent in the sense of a reasonable and prudent man acting in the same situation.

Mr. BELANGER. Do you mean that, any time a man forgets something, he is careless or negligent?

Mr. TEMPERO. No, what I am saying is, was he careless or negligent because he forgot; was he careless and negligent in the sense of a reasonable and prudent man acting in the same situation?

Mr. BELANGER. I agree that that determination has to be made.

Mr. TEMPERO. That is the determination that Mr. Ryan had to make in the end.

Mr. RANDALL. All of us are responsible for our conduct. It we forget to pay a bill on time, we're going to get a penalty of some kind. It is that way all through life. We are responsible for our forgetfulness or else we pay for it in every facet of life. That is the responsibility of every one of us.

The fact is that this gentleman forgot to do something, as the counsel made the point very well; therefore was he careless or negligent when or because he forgot?

Yet none of these matters was apparently taken into consideration, because the conclusion was reached that he was not careless or negligent.

I do not know what is going to happen to all these claims against FAA, but you will be mighty fortunate if you don't go to court on all of these.

I do not know who is responsible here. That is a legality we are not involved in. Somebody is going to make you state why you reached this conclusion, and what standard you applied in reaching it.

Are there any further questions?

Mr. Tempero, Mr. Romney, or Mr. Butterworth, do you have questions?

Mr. ROMNEY. Mr. Belanger, we have been talking about forgetfulness as an element in this debate on what constitutes carelessness.

We should also keep in mind that, in this case, as the National Transportation Safety Board concluded, controller No. 1 made some assumptions that certain flight paths would be maintained and that he thought that, in the view of those assumptions, he could control it.

The making of an assumption, it seems to me, is a positive act. It does not involve forgetfulness.

Was he justified in making those assumptions with the result that forgetfulness—which could happen to anyone—could have interposed itself and created this extraordinarily hazardous situation? Was he justified in making those assumptions?

Mr. BELANGER. I think the techniques he was using were commonplace techniques used throughout the system.

Mr. ROMNEY. I asked you the question, was he justified in making those assumptions?

Mr. BELANGER. I would have to refresh myself on what the two assumptions were?

Mr. ROMNEY. Let me read on page 6 of the NTSB report:

> Radar controller stated that, when he accepted the handoff of American 182, he realized there might be a traffic conflict between that flight and TWA 37. However, his previous experience that day had shown that several flights climbing eastbound out of Chicago to flight level 370 had been leveling off a considerable distance west of where the incident later occurred. He thought that, by keeping an eye on the situation, he would be able to turn the aircraft in case the required separation criteria would not be met.

I am using the language of the National Transportation Safety Board's safety recommendation forwarded to the Administrator. The concept of making certain assumptions is mentioned. I will read here from the safety recommendation A76–3:

> He (meaning radar controller No. 1) assumed that by monitoring the situation, he would know in time if the anticipated separation did not materialize. Thereafter, he became preoccupied with secondary duties which could have been relegated to the manual controller.

Is this forgetfulness?

Mr. BELANGER. No, that is not forgetfulness.

I would say that is poor judgment on his part.

Mr. RANDALL. What was counsel's question again?

Mr. ROMNEY. We are making an affirmative assumption that these two aircraft would continue along what he though to be their paths, and whether, in making these assumptions, this was forgetfulness. Mr. Belanger said no.

Mr. RANDALL. Mr. Belanger said no. Mr. Ryan did not say anything about it.

Here is a question for you, Mr. Ryan.

Did you make any assumptions before you reached your conclusion that No. 1 was not careless and negligent? Did you make any assumption about his forgetfulness?

The minority counsel developed a very important line of questioning. Obviously there was an element of forgetfulness here. There is no question about that. There cannot be.

Did you take all that into consideration when you reached your conclusion?

Mr. RYAN. I took into consideration the fact that he became preoccupied doing his job.

Mr. RANDALL. All right. But in so doing, he forgot about the two scheduled airlines on a collision course. He fixed all his attention on rerouting the Lear Jet.

Mr. RYAN. That is right.

Mr. RANDALL. It was, or it was not, forgetfulness. It has to be one of the two. Did you take that into consideration?

Mr. RYAN. I would like to say that it was not necessary for the controller to assume anything, since all the information necessary for him to separate the airplanes is displayed on the scope.

In other words, he was not operating in the dark assuming nothing was going to happen.

Mr. RANDALL. He was looking at the computer keyboard when he rerouted the Lear Jet. But the question is whether he was looking at these two aircraft coming together?

Mr. RYAN. Obviously, he was not looking at it at the time he should have been looking at it because he would have noted the altitudes.

Mr. RANDALL. All right. You have said that. You have concluded that that was not carelessness or negligence.

Mr. RYAN. That is right.

Mr. BELANGER. I think Mr. Ryan agrees with me. We are not trying to defend the controller in that he used poor judgment and poor control techniques. He did.

Mr. TEMPERO. Mr. Belanger, I personally believe, and I speak only for myself, the answers you and Mr. Ryan are giving are completely consistent with current FAA philosophy of what constitutes carelessness and negligence.

What I think we are trying to say to you is that you may very well not have an adequate definition of carelessness and negligence, and, for that reason, it would behoove the FAA to carefully study how they make a determination of exactly what is carelessness and negligence.

For example, in my own definition, if somebody is goofing off and something happens, that might very well be extreme carelessness or gross negligence. Somebody could be careless and negligent if he failed to meet the standard of the prudent man reasonably carrying out his duties.

Mr. BELANGER. I concede that you are undoubtedly correct, and that there is undoubtedly an area that it would be worthwhile to explore in greater depth.

Mr. RANDALL. It is not only worthwhile to explore, it is imperative that it be explored. It is of the very essence of importance. I think you would agree if you ran into a lot of lawsuits here, because you would find out how important it is.

Are there any more questions of these witnesses? We may have to take another look at this one of these days. We have another line of questioning that we have not even started on yet.

There is a rollcall vote on the floor of the House, and we will have to get over there.

Thank you, gentlemen, for being with us. We will be in touch with you later on.

Mr. BELANGER. I would like to say, we appreciate being here. You have given us a lot of food for thought. There is no question about it.

Mr. RANDALL. Maybe not much. Only time will tell whether we have given you enough. We have a lot of other things to ask you about.

Thank you all very much.

The subcommittee is adjourned, to reconvene subject to the call of the Chair.

[Whereupon, at 12:35 p.m., the subcommittee adjourned, to reconvene subject to the call of the Chair.]

○